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FOR THE

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1886-'87

IN TWENTY-EIGHT VOLUMES.

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49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC No. 79.

MICHIGAN AND ILLINOIS CANAL.

LETTER

FROM

THE SECRETARY OF WAR,

TRANSMITTING

A report of the Board of Engineers upon the proposed acquisition, by the Government, of the Illinois and Michigan Canal and construction of the Hennepin Canal, made in pursuance to a provision of the river and harbor act of August 5, 1886.

JANUARY 11, 1887.—Referred to the Committee on Rivers and Harbors and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 10, 1887.

The Secretary of War has the honor to lay before the Congress a report of a Board of Engineers, made in accordance with a provision of the river and harbor act of August 5, 1886, which is as follows, viz:

The Secretary of War is authorized and directed to appoint a Board of three engineers from the United States Army, whose duty it shall be to examine in all their relations to commerce the Illinois and Michigan Canal and the proposed Hennepin Canal, to consider their value and all other matters connected with their usefulness to navigation, and shall report upon the acquisition and improvement of the Illinois and Michigan Canal and the construction of the Hennepin Canal. The said Board shall report to the Secretary of War, who shall lay its report before Congress at its next session, together with the views of himself and the Chief of Engineers of the United States Army thereon; and $15,000, or so much thereof as may be necessary, is hereby appropriated for this purpose: *Provided*, That nothing in this paragraph shall be construed as committing the Government to the said improvement.

The report of the Chief of Engineers thereon and other documents and plans are annexed to the report of the Board of Engineers. This report has for its subject the general project of providing a navigable waterway between Lake Michigan and the Mississippi River. The project can be readily understood by dividing the distance between Chicago and the Mississippi into three several sections and considering each separately: (1) From Chicago, by the Illinois and Michigan Canal, to La Salle; (2) from La Salle, by the Illinois River, to Hennepin, and thence to the Mississippi River; and (3) from Hennepin, by the proposed Hennepin Canal, to points on the Mississippi River at or above Rock Island.

1. The State of Illinois, by an act passed in 1882, ceded to the United States the Illinois and Michigan Canal, its right of way, and all lands and appurtenances belonging thereto, for canal purposes, and for the

purpose of making and maintaining an enlarged canal and water-way from Lake Michigan to the Illinois and Mississippi rivers. The same to be accepted by the United States "upon the express condition that the canal shall be enlarged in such manner as Congress shall determine, and be maintained as a national water-way for commercial purposes."

The United States, upon accepting this act, would be bound to enlarge and maintain the canal as a national water-way for commercial purposes. The report of the Board of Engineers shows that to enlarge the canal between Joliet and La Salle, and provide for an increased navigation, equal to that contemplated by the improvements in progress on the Illinois River, between La Salle and its junction with the Mississippi, would require an expenditure of money greater than the cost of improving the river itself between Joliet and La Salle. If such is the case, the river route should be improved as recommended. The State of Illinois, however, before acceptance by the United States, should release the United States from the condition imposed by the act to enlarge and maintain the canal as it now exists, as a more suitable and cheaper water-way can be otherwise obtained.

In this connection another question is suggested by the report of the Board of Engineers. At present the canal has its eastern terminus in the south branch of the Chicago River, about 5 miles from Lake Michigan. This branch runs through the central business portion of Chicago, and is crossed by numerous draw-bridges. At present these bridges are a great impediment to navigation and to the land traffic of Chicago. If this river becomes the only outlet to the large commerce that may follow the opening of this new route of transportation between the Mississippi River and Lake Michigan, another outlet for the canal will be necessary, and economy and convenience may demand another channel to the waters of Lake Michigan. As to the cost of such a change, should it become necessary, we have no knowledge, no preliminary surveys of the country, with a view to the constructing of a new route to the lake, having been made.

The conclusion, therefore, would seem to be clear that the United States should not be bound to enlarge the existing canal between La Salle and Joliet, if the improvement of the Illinois River between those places will furnish a cheaper mode of communication, nor to maintain any portion of the canal, the abandonment of which may become necessary or desirable in the future. In that event, the United States should have full liberty to change the route.

2. Between La Salle and Hennepin the Illinois River supplies a satisfactory water-way. From Hennepin to the junction of the Illinois with the Mississippi, locks and dams are now in progress of construction to render it navigable. A portion of these have been built, and are now building, by the United States. But the improvements at Henry and Copperas Creek were made by the State of Illinois, which now exercises control and collects tolls on the commerce passing over this portion of the river. I agree with the Board of Engineers that a complete transfer of these improvements by the State of Illinois should accompany the cession of the canal. The United States should control the entire river, and all the improvements, rights, and privileges connected therewith; and the obligations to be assumed by the Government should be clearly defined before an acceptance can be considered advisable.

3. From the great bend of the Illinois, where it turns in a southerly direction, the second artificial line of water communication has been projected. This line, which runs in a general westerly direction "from

a point on the Illinois River at or near the town of Hennepin by the most practicable route to the Mississippi River at or above the city of Rock Island," is known as the Hennepin Canal, surveys for which were authorized by act of Congress of August 2, 1882.

The proposed canal runs from Hennepin westerly about 25 miles to the summit level between the two rivers. From this point three diverging lines have been surveyed and considered by the engineers, which strike the Mississippi River near Rock Island, Watertown, and Albany, respectively. Watertown is 7 miles and Albany 28 miles above Rock Island. The route terminating at Albany is known as the Marais d'Osier route. Reports of these surveys and estimates of cost are appended to the report.

Upon examination of the report of the Board it is evident that a commercial benefit to the country would result from the completion of these navigable water-ways between Lake Michigan and the Mississippi River. While that great river may be reached by the Illinois and Michigan Canal and the Illinois River, the mouth of the latter is so far south, that these water-ways do not afford sufficient or convenient communication with the Upper Mississippi. The report of the Engineers shows clearly that the construction of the Hennepin Canal is feasible, and that its benefits to commerce would be great. Whether they would be so great as to justify the cost is a matter for Congress to decide, and to assist this decision the statistics of commerce in the Northwest and the estimates for the construction of the canal are herewith presented.

The question of its western terminus is discussed in the report and all sides are fully presented in the accompanying papers. Of the three routes proposed the Board favors the Marais d'Osier route, terminating at Albany. General Newton, while holding the office of Chief of Engineers, declared himself in favor of the Rock Island route; and there are advocates of the third, or Watertown route.

Although from the report of the Board it would appear that the Marais d'Osier route, regarded as an engineering question alone, is preferable, yet in view of the existing routes of travel and transportation, and from military considerations, I am inclined to coincide with the opinion of General Newton in favor of the Rock Island route.

WM. C. ENDICOTT,
Secretary of War.

The SPEAKER OF THE HOUSE of REPRESENTATIVES.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., December 3, 1886.

SIR: I have the honor to submit herewith a copy of the report of the Board of Engineer officers constituted in compliance with the requirements of the river and harbor act of August 5, 1886, to examine, in all their relations to commerce, the Illinois and Michigan Canal and the proposed Hennepin Canal; to consider their value and all other matters connected with their usefulness to navigation, and to report upon the acquisition and improvement of the Illinois and Michigan Canal, and the construction of the Hennepin Canal.

In submitting this report for your consideration I beg leave to state, in further compliance with the requirements of the above act, that I concur in the opinions of the Board regarding the utility and impor-

tance to navigation and commerce of a water-way from Chicago to Grafton at the mouth of the Illinois River, but would call attention to the act of the State of Illinois of April 28, 1882, offering to cede the Illinois and Michigan Canal from La Salle to Chicago as being silent concerning the locks and dams at Henry, and at Copperas Creek, constructed for the improvement of the navigation of Illinois River, the retention of which by the State would deprive the United States of the control of 88 miles of river where tolls are charged by the State. With reference to the conditions in this act of cession regarding the enlargement of the canal, I would remark that the locks and dams that have been, and are to be, built by the United States below La Salle have been projected with a view to a steamboat navigation of the first class, and the project looks to a continuation of navigation upon the same scale between La Salle and Joliet, and since the cost of an enlargement of the canal between these points would, it appears, be greater than that of the improvement of the river itself, a river route between those points should be adopted.

I also concur in the opinions of the Board respecting the value and usefulness to navigation and commerce of a water-route from Chicago to the Mississippi such as the proposed Hennepin Canal, but I cannot fully concur in their views as to its proper terminus on the Mississippi.

Although the Marais d'Osier route, with a terminus near Albany, forms the cheapest and shortest line, and involves less lockage, it is by no means clear, in the present condition of the commercial relations existing on the two sides of the river, that it would be the preferable route.

Very respectfully, your obedient servant,

J. C. DUANE,
Brig. Gen., Chief of Engineers.

Hon. WM. C. ENDICOTT,
Secretary of War.

REPORT OF BOARD OF ENGINEERS APPOINTED, UNDER PROVISIONS OF THE RIVER AND HARBOR ACT APPROVED AUGUST 5, 1886, TO EXAMINE AND REPORT UPON THE ILLINOIS AND MICHIGAN CANAL, AND THE PROPOSED HENNEPIN CANAL.

SIR: The river and harbor act of August 5, 1886, contained the following clause, viz:

The Secretary of War is authorized and directed to appoint a Board of three Engineers from the United States Army, whose duty it shall be to examine, in all their relations to commerce, the Illinois and Michigan Canal and the proposed Hennepin Canal, to consider their value and all other matters connected with their usefulness to navigation, and shall report upon the acquisition and improvement of the Illinois and Michigan Canal and the construction of the Hennepin Canal. The said Board shall report to the Secretary of War, who shall lay its report before Congress at its next session, together with the views of himself and the Chief of Engineers of the United States Army thereon; and $15,000, or so much thereof as may be necessary, is hereby appropriated for this purpose: *Provided*, That nothing in this paragraph shall be construed as committing the Government to the said improvement.

The Board of Engineers, constituted under the above law, has the honor to submit the following report, viz:

At an early date in the history of Illinois the connection of Lake Michigan with the Mississippi was considered, and in 1822 and 1827 grants of land were made by the United States to Illinois to aid in the construction of such a waterway. (See Appendix No. 1.)

Under this grant the State of Illinois completed a canal (with locks 110 feet by 18 by 6 feet) reaching from Chicago to La Salle, on the Illinois River, a distance of 97 miles, the general direction of the canal being southwest. From La Salle to the mouth of the Illinois River at Grafton is 223 miles, and this part of the river has a system of locks and dams now carried well toward completion, which will give 7 feet of water at the lowest stages. Two of these locks and dams, at Henry and Copperas creeks, have been built in whole or in part by the State of Illinois, which manages them and charges tolls for their use. The others are being built by the United States. When they are completed they will furnish a large water-way from the Mississippi, at Grafton, Ill., to La Salle.

The State of Illinois offers to cede the Illinois and Michigan Canal from La Salle to Chicago to the United States, on the condition that the United States shall enlarge and maintain it.

The United States has not accepted the offer, and were she to do so it would place the two ends of the water-way from Chicago to Grafton in the possession of the United States, while Illinois would control the dams and locks now in her possession at Henry and Copperas Creeks, where tolls are charged. If the United States is to assume any new responsibilities, she should have control of the whole water-way, and not merely of its two ends. The enlargement of the Illinois and Michigan Canal with locks of the size proposed for the Hennepin Canal is desired by those interested in the Hennepin Canal. An enlargement to a very much greater size might enable the city of Chicago to send a much larger amount of sewage into the Chicago end of the canal than is now pumped into it, and would give a great water power at Lockport, where the canal falls to a level much below that of Lake Michigan.

The water-way from Chicago to Grafton, on the Mississippi River, is a most important one, and when completed there is little doubt that it will richly pay for itself in the reduction and regulation of freights.

But it does not give a direct water route from Lake Michigan to points on the Mississippi above Keokuk, a route that has long been desired. Hence, at an early date it was proposed to connect the bend in the Illinois River near Hennepin, about 15 miles below La Salle, where the Illinois and Michigan Canal terminates, with a point on the Mississippi River at or above Rock Island, by means of a canal. Such a canal, called the Hennepin Canal, is feasible at a reasonable cost, and need not exceed 64 miles in length, while the distance from Hennepin down the Illinois River to Grafton, and then up the Mississippi River to Rock Island, is about 486 miles. The saving in distance by water via a Hennepin Canal between Chicago and points on the Mississippi above Rock Island is thus seen to be over 400 miles. This general statement of the situation having been given, it remains to consider that one of the two routes on which the Board has been directed to report, namely, the route from Chicaga via the Illinois and Michigan Canal and Illinois River to Hennepin, and thence via the proposed Hennepin Canal to the Mississippi River at or above Rock Island.

The law under which the Board is acting requires it to "examine, in all their relations to commerce, the Illinois and Michigan Canal and the proposed Hennepin Canal, to consider their value and all other matters connected with their usefulness to navigation."

Their principal relation to commerce is as freight carriers and freight-rate regulators, and their usefulness to commerce will depend on the rates at which freight can be carried on them. The general considera-

tion of these questions does not depend on the details of location and construction, and hence they may fitly be considered before the detailed discussion of the two canals is taken up.

Few things are more remarkable than the great reduction in the cost of transportation which has taken place in the last few years between Chicago and New York.

The following table, for which the Board is indebted to Mr. Whitney, Acting Chief of Bureau of Statistics, shows that freight rates by water between these cities have been reduced in 1885 to about one-fifth their amounts in 1868, and all rail freights to about one-third.

TABLE 1.—*Average freight charges per bushel for the transportation of wheat from Chicago to New York during the years* 1868 *to* 1885, *inclusive.*

[From the Annual Reports on Foreign Commerce, 1883, 1884, 1885.]

Calendar years.	Average rates per bushel.			Calendar years.	Average rates per bushel.		
	By lake and canal.*	By lake and rail.	By all rail.		By lake and canal.*	By lake and rail.	By all rail.
	Cents.	*Cents.*	*Cents.*		*Cents.*	*Cents.*	*Cents.*
1868	25.3	29.0	42.6	1877	7.5	15.8	20.3
1869	24.1	25.0	35.1	1878	10.1	11.4	17.7
1870	17.5	22.0	33.3	1879	13.0	13.3	17.3
1871	21.6	25.0	31.0	1880	13.2	15.7	19.7
1872	26.6	28.0	33.5	1881	8.6	10.4	14.4
1873	19.2	26.9	33.2	1882	8.7	10.9	14.6
1874	14.2	16.9	28.7	1883	8.40	11.5	16.5
1875	11.4	14.6	24.1	1884	6.59	9.9	13.2
1876	9.7	11.8	16.5	1885	4.55	9.06	14.0

*Including Buffalo transfer charges and tolls.

The table also shows that the rates by water have been in each year from 25 to 50 per cent. less than by all rail, and indicates sufficiently how powerful a regulator of railroad freights from Chicago to New York the water-way between those cities has been. The estimate that railroads have of such water-ways and of their value is seen when a system like that of the Vanderbilts, reaching from New York to Chicago, puts steamers on the lakes as rivals to its own roads.

Definite ideas as to costs of transportation may be obtained from the following data, derived from Poor's Railroad Manual for 1886, viz:

TABLE 2.—*New York Central and Hudson River Railroad.*

Year.	Through freight east.	Through freight west.	Total way freight.	Earnings per ton-mile.	Expenses per ton-mile.
	Tons.	*Tons.*	*Tons*	*Cents.*	*Cents.*
1880	2,077,626	357,453	8,097,000	0.879	0.541
1881	2,056,588	436,497	9,098,000	0.783	0.563
1882	1,523,907	582,800	9,223,000	0.738	0.601
1883	1,452,159	361,161	9,079,000	0.910	0.680
1884	1,182,988	312,078	8,717,000	0.830	0.620
1885	1,146,687	297,210	9,087,000	0.680	0.540

TABLE 3.—*Lake Shore and Michigan Southern Railroad.*

Year.	Freight forwarded from Chicago.	Net rate per ton-mile.	Cost per ton-mile.
	Tons.	*Cents.*	*Cents.*
1880	1,084,000	0.75	0.43
1881	1,184,000	0.62	0.41
1882	900,000	0.63	0.41
1883	904,000	0.73	0.45
1884	812,000	0.65	0.43
1885	929,000	0.55	0.40

TABLE 4.—*Michigan Central Railroad.*

[Average rate per ton-mile.]

Year.	Cents.	Year.	Cents.
1880	0 84	1883	0.83
1881	0.72	1884	0.65
1882	0.77	1885	0.56

The three railroads just cited have their rates regulated during the summer, at least in part, by the rates on a water-way connecting the two ends of the roads, and, as stated by Mr. Albert Fink, the regulation as regards grain extends to the winter season, since if railroad rates were increased too much during the winter the grain would be stored to await the fall of rates at or before the opening of navigation. It should be remembered that rates per ton mile in the preceding table are the average rates for all the freight moved, and as local freights between non-competing points is charged habitually at a higher rate than through freight, the through rates must have been considerably less than the average rates given in the preceding tables. Thus, according to the report of the State engineer of New York for 1883, through freight rates on the New York Central and Hudson River Railroad for fourth-class freight in 1882 were 0.56 cent per ton-mile, while for way freight the rate was 0.87 cent.

An examination of the preceding tables for three great roads shows that in six years, from 1880 to 1885, the rates charged varied between 0.91 and 0.55 cent per ton-mile, while for these years the cost to the Lake Shore road varied between 0.40 and 0.45 cent per ton-mile, the charges varying between 0.75 and 0.55 cent per ton-mile.

Mr. Albert Fink stated (report Senate Select Committee on Interstate Commerce, Forty-ninth Congress, first session, 1886):

> The average cost on the roads between here (New York) and Chicago, which are operated the cheapest, is about 24 cents per 100 pounds, which includes general expenses, but does not allow anything for interest. * * * I do not think grain can be hauled for much less than about 20 cents, including general expenses; and the mere cost of movement cannot be less than 15 cents. The cost of returning empty cars must be charged to this service, and the lowest actual cost is not reimbursed by a charge of 12 cents per 100 pounds.

Taking the distance from New York to Chicago as 912 miles, a rate of 10 cents per 100 pounds, is 0.245 cent per ton-mile; 12 cents is 0.294 cent per ton-mile; 15 cents is 0.37 cent per ton-mile; 20 cents is 0.49 cent per ton-mile, and 24 cents is 0.58 cent per ton-mile.

The statement of Mr. Fink, who is a high authority on these subjects, are for averages for railroads between New York and Chicago. The

Lake Shore Railroad expenses are lower than 20 cents for 100 pounds; this must be due to its gentle grades, superior facilities, and cheap coal. The statement of Mr. Fink, as well as the rates of the roads above quoted, strongly influenced by competing waterways, and in the later years by railroad wars, show that average railroads cannot transport freight in large quantities, and for a long time at less than 0.5 cent per ton-mile; or in exceptionally favorable cases at about 0.4 cent per ton mile; these prices not including interest on bonds or dividends on stock. Mr. Fink, in the testimony already quoted from, says:

> It may be estimated that upon an average of $1 earned by all the railroads in the United States for a certain service 40 cents are required to pay 4½ per cent. interest on bonds and stock; 35 cents to pay the mere movement expenses above referred to; and, say, 25 cents to pay for the maintenance of the roadway and the general expenses of the organization.

The average freight charges on New York Central, Michigan Central, and Lake Shore railroads between 1880 and 1885, inclusive, varied between 0.80 and 0.65 cent per ton mile. Taking 40 per cent of this for interest there is left but about 0.40 cent per ton mile out of which future reductions in freight rates must come.

Much reduction in this does not seem possible. Nor does it seem possible that under the most favorable circumstances railroads can profitably convey large amounts of freight at less than 0.40 cent per ton mile, while for most roads this figure would rise to 0.5 or 0.6 cent.

Let us compare this rate with that at which grain can be carried on canal-boats, on sail-vessels, and on steamboats. The report of the Chicago Board of Trade for 1885 gives the freight rates on wheat by sail and by steam vessels from Chicago to Buffalo during 1885, as follows:

TABLE 5.—*Grain freights by Lake and Erie Canal.*

[The following were the current rates of freight on wheat and corn from Chicago to Buffalo, Oswego, or Kingston (sail), and to Montreal (steam); also to New York by lake and Erie Canal, for each week during the season of navigation, 1885.]

Week ended—	Wheat per bushel.			Week ended—	Wheat per bushel.		
	To Buffalo.	Erie Canal, Buffalo to New York.	Chicago to New York (lake and canal) including Buffalo charges.		To Buffalo.	Erie Canal, Buffalo to New York.	Chicago to New York (lake and canal) including Buffalo charges.
	Cents.	*Cents.*	*Cents.*		*Cents.*	*Cents.*	*Cents.*
April 4				August 8		4⅜	
April 11				August 15		4½	
April 18	3¼			August 22	1¾	5¼	4¾
April 25	2	5¾		August 29		5	
May 2	2¼			September 5		4⅛	
May 9	2¼	5½		September 12	1¾	4⅜	3½ to 4¼
May 16	2¼	4⅞	5	September 19		4⅜	
May 23	1⅛ to 2	4⅛		September 26		4¼	
May 30		4		October 3		4⅛	
June 6	1⅜	4¼		October 10		4⅜	
June 13		4¼		October 17		4⅜	
June 20		3⅞		October 24		5¾	5½
June 27		3¾		October 31			
July 4	1⅜	4		November 7			
July 11		4		November 14			
July 18		3⅞		November 21			
July 25	1 to 1¼	3⅞	3⅞				
August 1		3¾		Average	2.0	4.5	4.6

From this table it is seen that between April 18 and September 12, 8 85, eleven rates are given between Chicago and Buffalo by sail, whose average is 2 cents per bushel, the least rate being 1 cent. Calling the distance from Chicago to Buffalo by water 900 miles, 2 cents per bushel is at the rate of 0.08 cent per ton-mile.

Between May 9 and November 5, 1885, the average freight by steam vessels was 2.5 cents per bushel, or 0.1 cent per ton-mile. Table 5 gives also through rates from Chicago to New York, which are considerably lower than the partial rates just quoted, ranging from $3\frac{1}{4}$ to $5\frac{1}{4}$ cents per bushel, and which average 4.6 cents.

If 1.6 cents of this be taken as the lake part, and 3 cents as the canal part, there results seven hundredths of a cent per ton-mile on the lake, and 0.22 cent for the canal and river rate. These through rates are considerably lower than the sum of the partial rates in the same table. From April 25 to October 24, 1885, the average freight from Buffalo to New York via the Erie Canal, a distance of 500 miles, was 4.5 per bushel, corresponding to 0.33 cent per ton-mile, the lowest rate being $3\frac{3}{4}$ cents per bushel. But these were local rates, and through rates were lower.

Mr. Sweet, State Engineer of New York, states (Transactions American Society Civil Engineers, February, 1885):

> For the past four years the average grain rates from Chicago to New York during the season of navigation have been by rail, 14.9 cents; by lake to Buffalo and thence by rail to New York, 12.1 cents; and by lake and canal to New York, 9.9 cents per bushel.
>
> The large propellers of the lakes have, however, during this period, found a profit in carrying grain from Chicago to Buffalo at 2 cents a bushel, while the cost by canal from Buffalo to New York, though the distance is only half as great, without tolls, but including the cost of transfer, has at the same time been more than 4 cents per bushel.

From the statement of Mr. Sweet it is seen that the freight rates for 1885 are lower than for the average of the preceding four years.

Mr. J. D. Van Buren, jr., formerly State engineer of New York (Transactions American Society Civil Engineers, March, 1885), estimates the cost of transporting freight from Buffalo to New York via Erie Canal, when animal power is used, at 0.32 cent per ton-mile; when steamer and consort are used, at 0.31 cent. Mr. E. P. North, in the same Transactions, gives the average freight per ton from Buffalo to Albany excluding tolls, from 1878 to 1881, as $\$1\frac{17}{100}$ or 0.33 cent per ton-mile.

The following table, for which the Board is also indebted to Mr. Whitney, shows that the water rates sank lower in 1885 than in previous years:

TABLE 6.—*Average freight rates for the transportation of wheat.*

[Annual Report of Bureau of Statistics on Foreign Commerce.]

Year.	Rates per bushel.*						
	Average ocean rate from San Francisco to Liverpool.	All-rail rate from Chicago to New York and ocean steamer rate from New York to Liverpool.			Lake Erie Canal and Hudson River rate from Chicago to New York and ocean steamer rate from New York to Liverpool.		
		Rail rate.	Ocean steamer rate.	Total.	Lake, canal, and Hudson River.	Ocean steamer rate.	Total.
	Cents.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
1878	30.25	17.7	15.22	32.92	10.1	15.22	25.32
1879	29.93	17.3	12.40	29.70	13.0	12.40	25.40
1880	38.67	19.7	11.76	31.46	13.2	11.76	24.96
1881	46.28	14.4	8.16	22.56	8.6	8.16	16.76
1882	33.89	14.6	7.76	22.36	8.7	7.76	16.46
1883	25.47	16.5	9.08	25.58	8.4	9.08	17.48
1884	20.78	13.2	7.18	20.38	6.59	7.18	13.77
1885	.....	14.0	6.11	20.11	4.55	6.11	10.66

* Considerable differences will be observed between the sum of the average rail and ocean steamer rates and the sum of the average lake, Erie Canal, and ocean-steamer rates between Chicago and Liverpool, such differences ranging from 4.3 cents to 6.5 cents. This is explained as follows: First, the lake, Erie Canal, and Hudson River rates are only for the season of inland navigation, viz: From May to November, when the rail rates are usually lowest; Second, the rail rates in the table are schedule rates, which have from time to time been departed from during railroad wars. The exact average of the rail rates which have actually been charged cannot, therefore, be stated. On the other hand, the lake, Erie Canal, and Hudson River rates are subject to a small addition for marine insurance, amounting to about ½ cent.

The State Engineer of New York (Interstate Commerce Report, page 172), gives 0.27 cent per ton mile as the average rate of canal freights in 1884.

The following table, derived from report of Senate Select Committee on Interstate Commerce, page 246, shows the present relations of the Erie Canal and the trunk lines as grain and flour carriers to New York City:

TABLE 7.

Year.	Total receipts of grain and flour at New York, Philadelphia, Boston, Baltimore, and Montreal.	Percentage received at New York by canal.	Percentage received at New York by rail.
	Bushels.		
1878	293,000,000	22	29
1879	332,000,000	17	31
1880	341,000,000	20	28
1881	267,000,000	14	37
1882	211,000,000	15	38
1883	244,000,000	17	33
1884	225,000,000	17	34

From this table it is seen that for these years the canal has carried to New York from four to seven tenths as much grain and flour as all the trunk lines combined, and hence that its rates must powerfully influence those of the trunk lines.

Another evidence of the influence of the water-way between Chicago and New York on freight rates may be had by comparing average freight rates per ton mile on two great roads running east from Chicago and in immediate competition with the lakes with two great roads running west and northwest from Chicago without water competition.

The data are from Poor's Railroad Manual, 1886, for 1885.

TABLE 8.

Year.	Lake Shore Railroad, average rates per ton-mile.	Michigan Central Rail-Road, average rates per ton-mile.	Milwaukee and Saint Paul Railroad, average rates per ton-mile.	Chicago and Northwestern Railroad, average rates per ton-mile.
	Cents.	*Cents.*	*Cents.*	*Cents.*
1881	0.62	0.72	1.70	1.47
1882	0.63	0.77	1.48	1.48
1883	0.73	0.83	1.39	1.43
1884	0.65	0.65	1.29	1.31
1885	0.55	0.56	1.28	1.20

This table shows that rates charged on the first two roads running out of Chicago for five years past have been about one-half those charged on the other two. A part of this difference must be due to the regulating effect of the water-way through the lakes.

This effect again appears in the following table from the report of trade of Minneapolis, December 31, 1885:

TABLE 9.—*Tariff rates per* 100 *pounds on grain and flour from Chicago and Minneapolis to New York during the year* 1885.

Date.	From Chicago.	From Minneapolis.	Date.	From Chicago.	From Minneapolis.
Jan. 1 to Mar. 10	.25	.42½	Aug. 28 to Sept. 1	.15	.30
Mar. 10 to Apr. 28	.20	.37½	Sept. 1 to Sept. 2	.12	.27
Apr. 28 to May 1	.15	.32½	Sept. 2 to Sept. 9	.12½	.27½
May 1 to May 16	.15	.30	Sept. 9 to Sept. 16	.10	.25
May 16 to June 5	.12½	.27½	Sept. 16 to Sept. 18	.12	.27
June 5 to July 1	.13	.28	Sept. 18 to Oct. 1	.10	.25
July 1 to July 13	.15	.30	Oct. 1 to Nov. 23	.20	.35
July 13 to Aug. 14	.20	.35	Nov. 23 to Dec. 1	.25	.40
Aug. 14 to Aug. 17	.15	.30	Dec. 1 to Dec. 31	.25	.42½
Aug. 17 to Aug. 28	.20	.35			

The shortest distance by rail from Minneapolis to Chicago is 420 miles, and thence to New York is 912 miles. It is seen that for about half the period of navigation the tariff rates were as low or lower from Chicago to New York than from Minneapolis to Chicago. It might be supposed since Minneapolis is but 150 miles from Duluth, from which point the water rates to New York are about the same as from Chicago, that the Duluth route would act as a regulator on rates to Chicago. But (testimony on interstate commerce, page 1250) rail rates to Duluth were 12½ cents per 100 (June 24, 1885) for 150 miles, while they were but 15 cents to Chicago, 420 miles. Mr. Pillsbury testified that he thought the Duluth road would make its rate 7½ cents, but was compelled by the other roads to keep it up.

From the above table it is seen that September 9 to 16, 1885, the rate from Minneapolis to New York was 25 cents per 100 pounds. If

at this time the rate from Minneapolis to Duluth was 12½ cents, then at the tariff rate it cost as much to carry a bushel of wheat from Minneapolis to Duluth by rail, 150 miles, as to carry it from Duluth to New York.

For the last few years the competition between the trunk lines has been so fierce and prices have been so low, that it is not probable lower freight rates by rail between Chicago and New York will soon be seen.

Summing up the preceding discussion, we may take 0.50 cent per ton per mile as about the minimum rate at which grain in large quantities can be carried by rail at a profit on the average railroad, and 0.40 cent for the most favored road; about 0.27 cent as the rate for the Erie Canal; about 0.08 cent as the rate for long distances on the lakes.

These figures sufficiently show that railroads cannot successfully compete with the water-way from Chicago to New York, nor with the Erie Canal, in the carriage of large freights of low value per pound, except in cases where rapid transit is an important element. It is often asserted that the railroads have destroyed the importance of the Erie Canal as a grain carrier. Table 7, already given, shows the incorrectness of such an idea.

Having considered freight rates by water and by rail east from Chicago, it is now necessary to examine rates on the Mississippi River lines. If the Hennepin Canal were built, much of the freight passing through it would also move on the Mississippi River, and the rates at which freight could be carried on that river would largely influence the use of the canal. Mr. J. F. Barker, general freight agent of the Saint Louis and Saint Paul Packet Company, informs the Board (September 30, 1886) that the rates on grain that have prevailed for the last four years from Saint Paul to Rock Island are 12½ cents per hundred, and from Saint Paul to Saint Louis, 15 cents. Mr. E. M. Dickey, superintendent of the "Diamond Jo Line" (October 4, 1886), states—

> Our average rate from Saint Paul to Rock Island on this commodity (grain) would be about 10 cents per 100 pounds, and from Saint Paul to Saint Louis 12½ cents to 15 cents * * *.

Average rate on freight shipped from Rock Island in 1885 was 15 cents per 100 pounds.

Average rate on freight shipped to Rock Island in 1885 was 11 cents per 100 pounds.

In giving the averages of freight rates to Rock Island, he adds:

> These averages are of course on business largely local, and in most cases of course in small lots. There has been little through business to or from Rock Island for some years. Large shipments of through freight would materially reduce this average.

The rate of 12½ cents per hundred from Saint Paul to Saint Louis, a distance of 700 miles by river, is 0.40 cent per ton-mile and 15 cents is 0.48 cent.

From the accompanying letter from Maj. A. Mackenzie (Appendix No. 2) it will be seen that 3½ feet of water may be expected from Saint Paul to Rock Island during the season of navigation, and that 6 feet may be expected about one-half of that season. The end now in view in improving the Upper Mississippi is to obtain 6 feet from Saint Paul to Saint Louis. Even as the river now is, with a depth almost always exceeding 4 feet, its freedom from locks and its great width allowing high speeds, there can be no doubt if a large amount of freight offered itself for carriage that greater facilities in handling would develop themselves and that competition would reduce the existing minimum rate of 0.40 cent to that of the Erie Canal, or to about 0.30 cent per ton mile.

When the low water depth of 6 feet is obtained from Saint Paul to the western terminus of Hennepin Canal, barges loaded with 400 to 600 tons could be used in place of the canal-boats of 240 tons on the Erie Canal.

The locks on a canal fix the size of the boats using it. On the Erie Canal the locks are 110 feet by 18 feet by 7 feet. The canal-boats can carry 240 tons. On the proposed Hennepin Canal and the enlargement of the Illinois and Michigan Canal, the locks are to be 170 feet by 30 feet by 7 feet, and to admit barges that can be loaded to 600 tons. With the Upper Mississippi improved to 6 feet depth, rates through it and the canals to Chicago, without tolls, should sink to 0.20 cent per ton-mile.

These considerations lead the Board to the conclusion that if a large business should be developed, grain can be carried by the canal from the Mississippi to Chicago at 0.20 to 0.30 cent per ton-mile. The distance by the shortest rail route from Saint Paul to Chicago is 410 miles. The distance by the proposed water route from Saint Paul to Chicago is about 530 miles. At 0.2 cent per ton-mile the freight would be $1.06 per ton, or 4.7 cents per hundred pounds.

It has already been seen that in the summer of 1885 rail rates on grain from Saint Paul to Duluth were 12½ cents and to Chicago 15 cents per 100 pounds. Hence, even if the cost of transportation on a water-way from Saint Paul to Chicago, much larger than the Erie Canal, were as great as on the Erie Canal for some years past, say about 0.30 cent per ton mile and one-half greater than has been taken above, this would only raise it to 7 cents per 100 pounds from Saint Paul to Chicago. Such a rate would compel a large reduction in the rail rates from Saint Paul to Duluth and Chicago on grain. Grain, however, is not the only freight which can be profitably transported by water.

The report of the Duluth Board of Trade, 1885, gives 372,000 tons of coal as received there by lake in 1884, and 595,000 in 1885, freight rates from Buffalo being in some cases as low as 25 cents per ton. From the report of the Chicago Board of Trade, 1885, page 158, it appears that 863,000 tons of coal were shipped from there by the Chicago and Northwestern, the Milwaukee and Saint Paul, and the Chicago, Burlington and Quincy railroads.

How much of this coal goes west to or beyond the Mississippi is unknown, but there is undoubtedly a large amount.

The Chicago, Milwaukee and Saint Paul tariff rate of December 1, 1885, on soft coal in car-loads from Chicago to the Mississippi at Savannah, was $1.75 per ton. It could be carried via the proposed Hennepin Canal, if in large quantities, at 50 cents.

The use of anthracite coal along the Mississippi and west of it is reported to be rapidly increasing. If the freight on it from Chicago to the Mississippi could be reduced by $1 per ton, this increase would doubtless be still more rapid.

Any freight whose value per pound is small and which does not need rapid transit would be affected in the same way as coal.

Thus far the water-route from Chicago to the Mississippi has only been considered as affecting rates from points on the Mississippi to points on the lakes. The great railroads running west from Chicago reach far into the grain regions west of the Mississippi, and were the water-ways constructed, they might make rates to the Mississippi so nearly equal to those to Chicago that shippers would find no advantage in shipping to the Mississippi and thence by water to Chicago.

The railroads would have power to do this; but the danger of hostile legislation would make the wisdom of such a policy doubtful.

It therefore seems probable that the influence of this water-route would be felt far west of the Mississippi.

The Board, therefore, reports that in its opinion the water-way from Chicago to the Mississippi River will be valuable and useful to navigation; that it will give a water-way from Chicago to Saint Paul, over which freights of low cost per pound and not demanding the most rapid transit can be transported at rates much below existing rates by rail, and that the influence of this water-way in reducing rates of freight will probably extend west of the Mississippi.

The Board is also of the opinion that the benefits to the people affected by it will exceed the cost of its construction, as specified hereafter.

The general conclusions of the Board as to the "usefulness to navigation" of this water-way having been given, it remains to consider the details of the two parts, namely, the Hennepin Canal and the Illinois and Michigan Canal.

HENNEPIN CANAL.

The water-route from Lake Michigan to the Mississippi River is, from Chicago, through the Illinois and Michigan Canal, 97 miles, to La Salle, on the Illinois River, thence 17 miles down the Illinois River, and thence to the Mississippi River by the proposed Hennepin Canal. A few miles below La Salle and 3 miles above Hennepin, Ill., the Illinois River, which above has been flowing westward toward the Mississippi River, makes a sudden bend to a nearly southerly course, almost parallel for many miles to that of the Mississippi River, and at a distance from it of 50 or 60 miles.

Many years ago it was proposed to connect the Mississippi River in the vicinity of Rock Island with the Illinois River, at or near Hennepin, by means of a canal. The history of the surveys of different routes may be found in a report by Maj. W. H. H. Benyaurd, Corps of Engineers, U. S. A., published in the Report of the Chief Engineers U. S. A., for 1883. From this report it appears that Mr. J. O. Hudnutt made a survey in 1866, for private parties, of a canal-route from Hennepin to Watertown, on the Mississippi River, with a feeder from Rock River, at Dixon. An estimate was made of $4,500,000, for a canal 60 feet wide at the water-surface, 6 feet deep, and with locks 150 feet by 21 feet.

In 1870 the Government first had a survey made by Mr. G. P. Low, under General Macomb's directions. The route for canal and feeder was nearly that followed by Mr. Hudnutt. The estimated cost of a ship-canal 8 feet deep and 160 feet wide at the water-line, with locks 350 feet by 75 feet, with feeder 7 feet deep and 140 feet wide, was $12,479,693.

In 1874 an estimate was made of $4,541,000 for a canal along the same route, but with locks only 170 feet by 30 feet. Under the act of Congress passed August 2, 1882, a resurvey was made under the direction of Maj. W. H. H. Benyaurd, several routes being included.

Beginning on the Illinois River, $1\frac{3}{4}$ miles above Hennepin, the routes were common for 25 miles, to where the Dixon feeder enters the canal, the best route for ascending 205 feet from the Illinois River to the summit being through the valley of Bureau Creek. From the feeder west diverging routes were surveyed to near Albany, on the Mississippi River, via the Marais d'Osier, and to Watertown, on the Mississippi. These routes were called the Marais d'Osier and the Watertown routes, respectively.

The length of each route is 64 miles. From the 58th mile on the Watertown route a line to Rock Island was surveyed. It enters Green River at the 59th mile, follows it to its junction with the Rock River, then follows the latter to Milan, when it crosses the low point separating the Mississippi from the Rock River. Its total length is 74.5 miles. The common lockage in ascending from the Illinois River to the summit level is 205 feet. In going west the descending lockage by the Marais d'Osier route is 75 feet; by the Watertown route 86 feet; by the Rock Island route 101 feet.

Supplementary surveys, made in 1885–'86, were reported March 6, 1886, by Maj. T. H. Handbury, Corps of Engineers, U. S. A. (Ex. Doc., page 117, House Report, Forty-ninth Congress, first session). These additional surveys related to modifications of the Watertown and Rock Island routes. A part of the new Watertown route lies a few miles to the north of the old route running via Penny's Slough. When this new line strikes Penny's Slough the new Rock Island line leaves it, following the Rock River to the vicinity of Milan and then crossing to the Mississippi River.

The following table, extracted from Major Handbury's report, gives the estimated cost of the different routes:

TABLE 10.

Marais d'Osier Route, distance 64 miles:	
Estimated cost of construction of canal, including right of way	$5,811,367 50
Estimated cost of maintenance and ordinary repairs annually	88,600 00
Outfit of dredges, boats, &c	36,000 00
Watertown Route (via Green River), distance 65.2 miles:	
Estimated cost of construction of canal and feeder, including right of way	$7,207,646 88
Estimated cost of maintenance and ordinary repairs annually	91,245 00
Outfit of dredges, boats, &c	36,000 00
Watertown Route (via Penny's Slough), distance 64.9 miles:	
Estimated cost of construction of canal and feeder, including right of way	6,306,552 83
Estimated cost and maintenance and ordinary repairs annually	90,000 00
Outfit of dredges, boats, &c	36,000 00
Rock Island Route (via Green River) revised, distance 74.5 miles:	
Estimated cost of construction of canal and feeder, including right of way	6,709,836 00
Estimated cost and maintenance and ordinary repairs annually	94,820 00
Outfit of dredges, boats, &c	36,000 00
Rock Island Route (via Penny's Slough and Rock River), distance 77 miles:	
Estimated cost of construction of canal and feeder, including right of way	6,524,052 61
Estimated cost of maintenance and ordinary repairs annually	84,000 00
Outfit of dredges, boats, &c	36,000 00
The length of the feeder from Rock River at Dixon is 37 miles, and its estimated cost, included in the above	1,664,117 50

The estimates are for a canal 80 feet wide at the water surface, 7 feet deep, and with locks 170 feet by 30.

It will be seen from the brief history now given that many surveys have been made. Although further surveys would necessarily be made before adopting a final and exact location for construction, it is not probable that routes much more favorable can be found.

There seems no doubt as to the proper location of the eastern end of the Hennepin Canal.

It is approximately fixed by the great bend in the Illinois River and the valley of Bureau Creek, which enters the Illinois River near Hen-

nepin, furnishes a route by which the canal can climb up to the summit, 205 feet above the Illinois River.

Of the various routes from this summit level that by Marais d'Osier is the cheapest. But as strong interests desire a different route, an examination of the principal ones is necessary.

It is evident that the canal should be so located as to give, on the whole, the cheapest transportation to the aggregate freight that is to pass through it. Its through freight eastward will probably be derived from the portion of the Mississippi between Saint Paul and Keokuk, which are 508 miles apart. Keokuk is 124 miles below Rock Island and 149 miles from the mouth of the Illinois River. In view of the greater ease in moving freight down-stream rather than up, and of the more facile navigation in the Illinois River than in the Hennepin Canal, Keokuk may be taken as the southern point on the Mississippi from which freight might go to Chicago through the Hennepin Canal. Below this point the Illinois River would be used.

The northern limit is, of course, Saint Paul, 384 miles by river from Rock Island.

Even if as much freight would pass through the Hennepin Canal from the lower half of this stretch of 508 miles from Keokuk to Saint Paul as from the upper, the western terminus of the canal should be as near the middle of the stretch as practicable, which would carry the terminus far above Rock Island. In fact, if the canal accomplishes what is hoped for it, the larger part of its business will come from points above Rock Island. This larger business should then have the shortest route to Chicago, and it would be unjust to lengthen its route to accommodate a small part of its business. The two points which have strong claims for the location of the western terminus of the canal are Rock Island for the Rock Island route, and a point 2 miles below Albany for the Marais d'Osier route. Albany is about 30 miles above Rock Island, and the route from points above it to Chicago is 40 miles shorter by the Marais d'Osier route than by the Rock Island route.

If the Rock Island terminus were selected, all business from up the river would have in this additional 40 miles to descend the Rock Island Rapids and then lock up 26 feet to get back to the level of the Marais d'Osier route.

For freight bound west the objection to the Rock Island route would be that it would give to all freights for points above Albany the increase in lockage and distance already mentioned, and 30 miles of the increased distance would be up-stream and over the Rock Island Rapids.

If the canal is to do a large business, the bulk of its freight should not be subjected to this detour past Rock Island.

In this discussion as to termini it has been tacitly assumed that the canal will do a business large enough to develop all the terminal facilities it may need for transacting its business.

If its business were a local one and a small one, as would be the case if Rock Island, Moline, and Davenport freight formed a considerable portion of its whole freights, there would be a decided advantage in having its terminus at Rock Island, which could easily supply terminal facilities and give it local trade. But in that case it would lose its strongest claim for being built by the United States.

The Watertown route has its terminus intermediate between the other two; situated on the rapids, its approaches are bad, and this route from Saint Paul to Chicago is 21 miles longer than the Marais d'Osier route.

In view of all the circumstances of the case the Board prefers the Marais d'Osier route. This route is 64 miles long between the Illinois River near Hennepin and the Mississippi River near Albany.

The dimensions proposed for it by Major Benyaurd, and which seem judicious, are, locks 170 feet by 30 feet by 7 feet; width of canal at water-surface, 80 feet; ascending lockage from Illinois River to summit level, 205 feet by 23 locks; descending lockage to the Mississippi River near Albany, 75 feet by 8 locks; feeder from Dixon, Ill., 37 miles long.

It seems not improbable that surveys for the precise and final location may indicate a line near the junction, with the feeder somewhat further north, thus shortening the feeder and perhaps slightly reducing the cost.

Such surveys would be made after the construction of the canal was decided on.

Estimated cost of the Hennepin Canal, $5,811,367.50.

(For further details see Major Benyaurd's report in Report of Chief of Engineers for 1883.)

Objections have been raised to the Marais d'Osier route on account of the overflow at its western end, at times, by the Mississippi.

These objections are unimportant in comparison with the advantage of this route.

ILLINOIS AND MICHIGAN CANAL.

The following condensed history of the inception and construction of the Illinois and Michigan Canal is mainly taken from Appendix A to the report of General J. H. Wilson and Mr. William Gooding upon the survey of the Illinois River, dated December 17, 1867. (See Annual Report of the Chief of Engineers, 1868, pages 454 and 455.)

Very soon after Illinois became a State, steps were taken to secure the construction of a canal "between the navigable waters of the Illinois River and Lake Michigan," and as early as 1822 Congress, by act approved March 30 of that year, authorized the State "to survey and mark through the public lands of the United States the route of the canal connecting the Illinois River with the southern bend of Lake Michigan," and 90 feet on each side of said canal were reserved from sale for canal purposes.

This reserve was doubtless made mainly for the purpose of future enlargement, as it is not to be supposed that the State, in its infancy, would make an improvement of sufficient capacity to meet the wants of the country when its resources should be developed.

By act of the general assembly of the State of Illinois approved February 14, 1823, a board of commissioners was appointed and instructed to have the route of the canal surveyed and the cost of the work estimated and reported to the general assembly.

They were further instructed "to invite the attention of the governors of the States of Ohio and Indiana, and, through them, the legislatures of their respective States, to the importance of improving and connecting the navigation of the Wabash and Maumee rivers by canal communications," thus indicating in some degree the extent of the water communication of which this particular canal was to form part.

In 1825, in accordance with this act, five plans were submitted by the board of commissioners, the estimates varying from $639,000 to $716,000.

By act of Congress approved March 2, 1827, the United States—

Granted to the State of Illinois, for the purpose of aiding the said State in opening a canal to unite the waters of the Illinois River with those of Lake Michigan, a quantity of land equal to one-half of five sections in width on each side of said canal,

and reserving each alternate section to the United States, to be selected by the Commissioner of the Land Office, under the direction of the President of the United States, from one end of the said canal to the other; and the said lands shall be subject to the disposal of the legislature of the said State, for the purpose aforesaid, and no other: *Provided*, That the said canal, when completed, shall be, and forever remain, a public highway for the use of the Government of the United States, free from any toll or other charge whatever, for any property of the United States, or persons in their service passing through the same: *Provided*, That said canal shall be commenced within five years, and completed in twenty years, or the State shall be bound to pay to the United States the amount of any lands previously sold, and that the title to purchases under the State shall be valid.

* * * * * * *

This grant amounted to 284,000 acres.

By act of Congress approved March 2, 1833, the foregoing act was amended to permit the State of Illinois to use and dispose of the lands granted "for the purpose of making a railroad instead of a canal, as in said act contemplated," and the time for commencing and completing was extended five years.

Section 2 of an act of Congress approved August 29, 1842, authorized the governor of the State of Illinois " to cause to be selected, from any of the unsold public lands in that State, not subject to the right of pre-emption, the quantity of 5,760 acres, in lieu of" lands theretofore selected under the act of March 2, 1827, " but which had been sold and patented to individuals by the United States before the location by the said State had been approved."

By act of Congress approved August 3, 1854, the governor of the State of Illinois was " authorized to cause to be selected the balance of the land to which that State is entitled under the provisions of the act of the second of March, eighteen hundred and twenty-seven," from any public land in said State subject to private entry, to complete an amount equal to one-half of five sections in width on each side of the canal.

Somewhat over 32,000 acres were selected under this authority.

It will be seen from the foregoing that Congress has, by successive acts through a series of years, recognized the importance of the Illinois and Michigan canal.

By act of the general assembly of the State of Illinois approved January 22, 1829, a new board of canal commissioners was authorized to commence the construction of a canal, and to dispose of the lands granted by the United States to provide means with which to carry on the work.

Under the proviso of section 2 of said act surveys were made in 1830 by a party of engineers acting under the War Department. Their investigations, however, were mostly confined to the practicability of the canal, supply of water, &c.

In 1833 other surveys and estimates were made under authority of the State, as provided in the act of the general assembly approved February 15, 1831, and the engineers estimated the cost of constructing a canal 40 feet wide and 4 feet deep at $4,043,000.

It was not until 1836, however, that efficient measures were adopted for the prosecution of the work.

Under act of the general assembly approved January 9, 1836, a new board of canal commissioners was organized, with authority to construct the canal, and Mr. William Gooding was appointed engineer.

An accurate survey was made and estimates furnished by him of the probable cost of a canal 6 feet deep, 60 feet wide at surface, 36 feet wide at bottom in earth excavation, and 48 feet in rock, with locks 110 feet long, 18 feet wide, and having 6 feet of water on their miter-sills.

Portions of the work were put under contract in June of that year, and fair progress was made on the whole line until 1841, when, for the want of adequate means on the part of the State, the work was gradually suspended until March, 1843, when all operations ceased.

The act of the general assembly, approved February 21, 1843, known as the "trust law," provided for the completion of the canal and the payment of the canal debt.

It was not until 1845, however, that operations were resumed, but after resumption the work was carried to completion, and the canal brought into use in the spring of 1848.

It was intended that the canal should extend from Bridgeport to Ottawa, but the southwestern terminal point was finally located in the vicinity of La Salle, the total length being 97.24 miles.

The capacity of the canal, as completed by the canal trustees, was the same throughout as that fixed when work was commenced in 1836, but a material change was made in the reference of the bottom of the canal on the Summit Division to bring the cost of the canal within the means provided for its completion. The original intention was to cut down the summit between Lake Michigan and Lockport, and draw through this "deep cut" a supply of water from the lake sufficient for canal purposes. Instead of this, the canal was completed for about 26½ miles on a level, averaging 9 feet above the original bottom, and water supplied for the summit by means of the Calumet feeder, 16½ miles long, and by pumping-works at Bridgeport.

The abandonment of the original plan of the "deep cut" involved the necessity of constructing the Kankakee feeder, which is received into the canal just above the junction of the Kankakee and Des Plaines rivers.

The Chicago River, from which the summit level received a considerable portion of its water supply through the pumping-works at Bridgeport, has always been the receptacle of the sewage of the city. With the growth of the city the foulness of the river increased to such a degree as to demand the adoption of some plan for its amelioration.

This resulted in the act of the general assembly of the State of Illinois approved February 16, 1865, entitled "An act to provide for the completion of the Illinois and Michigan Canal upon the plan adopted by the State in 1836," the object of which was to obtain, by cutting down the summit level, a flow of water from Lake Michigan through to the Illinois River, thus cleansing Chicago River. The work of deepening the summit level was commenced in December, 1865, and continued until July, 1871, when it was completed, the average vertical cut being about 8 feet; that is to say, from 2 feet above city datum (city datum is low water of 1847 in Lake Michigan) to 6 feet below. It was intended that the bottom from Bridgeport to Lockport should have a fall of 3 feet.

In the course of time, from caving and sliding banks and from other causes, the canal prism was considerably reduced and the flow of water greatly diminished. The water that passed Lockport, Joliet, and other points on the canal finally became so offensive, that in 1881 a joint resolution was passed by the legislature of Illinois, under which the city of Chicago was compelled to erect, at Bridgeport, pumping-works of a capacity of at least 60,000 cubic feet per minute.

The lift at Bridgeport varies with the level of Lake Michigan.

DESCRIPTION OF THE CANAL AS IT NOW EXISTS.

The Illinois and Michigan Canal commences at Bridgeport, on the South Branch of Chicago River, 5 miles from Lake Michigan by the course of the stream.

It extends thence in a southwesterly direction 97.24 miles, and terminates on the Illinois River near La Salle, thus completing a most important water-route between Lake Michigan and the Mississippi River at a point only about 40 miles above Saint Louis.

The canal was intended to be 60 feet wide at the water surface, 48 feet wide on the bottom, with locks 110 feet long, 18 feet wide, and having a depth of 6 feet on their miter-sills. Cross-sections of the canal taken from recent surveys show an increased width at the water surface, caused by caving and sliding in of the side slopes.

Entrance to the canal at Bridgeport is effected through a lock, the lift of which varies with the fluctuations in the level of Lake Michigan.

All levels on the canal are referred to the Chicago city datum, which is the low water of 1847.

From Bridgeport the summit level of the canal extends to Lockport, a distance of 29½ miles, where Lock No. 1 is located, with a lift of 10.30 feet. One mile beyond No. 1 Lock No. 2, with a lift of 9.65 feet, is reached, and in another mile Locks No. 3 and 4, with lifts respectively of 9.85 and 9.90 feet.

A short distance below No. 4 the canal enters the Des Plaines River, which is used for a distance of 2 miles. Lock No. 5, having a lift of 10.10 feet, is located on the right bank of the Des Plaines, 1¼ miles below No. 4.

The distance from Bridgeport to Lock No. 5 is 33¼ miles, and the surface of the water in the pool above it is 42.08 feet, the combined lifts of the locks above being 39.70.

The canal leaves the river at a point some 3,000 feet below Lock No. 5 by means of a guard-lock, the lift of which is given as 0.125 foot. It then continues to the town of Channahon (45th mile) where Lock No. 6, with a lift of 11.87 feet, takes it into the Du Page pond.

Lock No. 7, with a lift of 3.90 feet, takes the canal from the Du Page River, and at the 48th mile it is joined by the Kankakee feeder.

Three-quarters of a mile below the aqueduct the Des Plaines and Kankakee unite to form the Illinois.

Crossing the Au Sable River, Lock No. 8, with lift of 6.55 feet, is reached at the 53d mile.

At Marseilles, near the 75th mile, the canal passes through two locks, the lifts of which are 8.33 feet each. Fox River is crossed 7 miles beyond, and at a further distance of 1½ miles the canal receives the Fox River feeder.

Lock No. 11, lift 9.75 feet, is located at the 82d mile; Lock No. 12, lift 9.85 feet, at the 85th mile; Lock No. 13, lift 6.40 feet, at the 94th mile; and Locks Nos. 14 and 15, with lifts, respectively, of 13.75 and 11.52 feet, at the 96th mile, the southern boundary of the city of La Salle. Below this the canal is connected with the Illinois River by a steamboat channel about 1 mile in length.

The fall from water surface of the pool above Lock No. 5 to present low-water surface in Illinois River at La Salle is 100.25 feet, the combined lifts of the locks being 100.47 feet.

It must be noted that the terminus of the canal is now in the pool created by the dam at Henry, on the Illinois River, and that the present low-water surface is 4.4 feet above the low-water level at the time the canal was completed.

Although not a part of the canal, yet forming an extension of it, and under the management of the Board of Canal Commissioners, the improvements at Henry and Copperas creeks should be included in any description of the Illinois and Michigan Canal.

These improvements consist at each place of a dam, by means of which a navigable pool is formed in the river above, the dams being passed by looks.

The dam at Henry is 6 feet 4 inches high and raises the low-water surface, 38 miles above, at La Salle, 4.4 feet.

That at Copperas Creek, about 60 miles below, is 6 feet 7 inches high, and raises the low-water surface immediately below the Henry Dam 2 feet.

The locks are each 350 feet long, 75 feet wide, with 7 feet of water on the miter-sills. The system is intended to give a 6-foot navigation, and tolls are levied by the State of Illinois upon the passing commerce.

The United States contributed the sum of $62,359.80 toward the construction of these works.

In further extension of this system the navigatiou of the Illinois River below Copperas Creek is being improved by the United States by a dam and lock at La Grange and another at Kampsville.

These are well advanced in construction, and it is estimated that they can be completed by an additional expenditure of about $700,000.

FURTHER CONSIDERATIONS.

When these improvements shall have been completed there will be good navigation from La Salle to the Mississippi River for the largest class of Western steamboats drawing 6 feet of water, thus making it one of the most important thoroughfares for heavy freight in either direction.

The estimated cost of extending this system from La Salle to Joliet is $3,433,562, thus bringing it to within 34 miles of Chicago.

The question of the enlargement of the Illinois and Michigan Canal from Joliet to Chicago, to accommodate this commerce without transshipment, has been discussed at length by General J. H. Wilson (see Ex. Doc. No. 16, House of Representatives, Fortieth Congress, first session).

Since the date of that report the conditions have materially changed, and in a new discussion of the subject other routes than the one contemplated by General Wilson should be considered.

THE RELATION OF THE CANAL TO COMMERCE.

Including the commerce through the locks at Henry and Copperas creeks, which, though on the Illinois River, really constitute an extension of the Illinois and Michigan Canal, the amount transported during the five years ending with 1885 was 4,547,071 tons, thus showing traffic to an extent little suspected by those who have not looked into the subject.

This commerce comprised a great variety of products, prominent among them being flour, salt, corn, oats, wheat, coal, ice, sand and gravel, lumber, stone, and general merchandise.

Parallel to the canal and throughout the greater part of the distance from Chicago to La Salle, along its very banks, private enterprise has built the Chicago, Rock Island and Pacific Railroad.

The two routes are, therefore, in direct and close competition between all points on the canal, with the resulting benefit to both producers and consumers.

It has been demonstrated time and again that available water routes always lessen the cost of transportation by competing land routes.

This influence is so wide spread, extends in so many ways, that the full effect is indeterminable.

Probably no higher authority exists upon this subject than Mr. Albert Fink, who has testified before a Congressional committee—

> That water routes not only control the tariffs of their immediate railroad competitors at points where they can render like service to the same people, but their influence reaches directly and indirectly the remotest parts of the country.

Limiting the discussion, however, to the immediate effect of the canal upon rates by rail, reference is made to the statement found on page 233, Part 1, Senate Report 307, Forty-third Congress, first session, that—

> The freight charges on the Chicago, Rock Island and Pacific Railroad is only 8 cents per 100 pounds from Henry to Chicago, between which points there is water competition, while the rate from Tiskilwa, only 12 miles further west than Henry, and beyond the effect of canal competition, is 15 cents per 100 pounds, or nearly as much for 12 miles as for 100 miles.

Comment upon such facts is quite unnecessary.

Assuming that the commerce of the canal is carried an average distance of one-third its length, the traffic above referred to may be considered as 1,516,000 tons transported 96 miles, with a saving of $1.40 per ton in freight charges, or in the short period of five years a total of $2,122,400 to be distributed amongst the producers and consumers, many of these being at points so remote that they may never have even heard of the Illinois and Michigan Canal.

But the direct benefit is not limited to the freight carried by canal. It is not improbable that an equal or even greater amount of freight carried by the railroad was affected, and had the advantage of the lower rate compelled by the existence of the water-route; if so, the total given above should be at least doubled to obtain the actual saving in charges.

It is a matter of very little consequence whether the canal carries any freight or not so long as the fact that it is there, and in readiness for the purpose, affects the charges by rail, reducing them to such extent that shippers prefer land transportation.

Neither does it seem to injuriously affect the competing railroad in this case, since the stock is quoted to-day (October 25, 1886), at $125 per share.

COST OF THE CANAL.

According to General J. H. Wilson (Annual Report of the Chief of Engineers, 1868, page 455), the total original cost of the canal was $6,409,509.95.

But Mr. Joseph Utley, president of the Board of Canal Commissioners, in a communication dated March 7, 1874, addressed to "Hon. Wm. Windom, chairman of the Senate Committee on Transportation," states that "the total cost of the canal was $6,557,681.50" (see page 93 of Appendix to Senate Report 307, Part I, Forty-third Congress, first session.

This is confirmed by the statement included in the following correspondence:

ILLINOIS AND MICHIGAN CANAL,
SUPERINTENDENT'S OFFICE,
Lockport, Ill., March 1, 1879.

DEAR SIR: The original cost of the Illinois and Michigan Canal has been called in question, and stated to be $16,000,000. For the purpose of aiding the legislature in considering the question whether the canal is worth preserving, I desire you to prepare a full and careful statement from the records of the general office at Lockport,

showing the original cost of the canal, how much has been received from the sale of lands granted for the canal by the General Government, and how much have been the net revenues of the canal to date.

Respectfully yours,

WM. THOMAS,
General Superintendent.

D. C. JENNE, Esq.,
Chief Engineer.

CANAL OFFICE,
Lockport, Ill., March 1, 1879.

DEAR SIR: At your request, contained in your communication of this date, I have made a careful examination of the books and reports on file in this office, and find that the total cost of construction of the Illinois and Michigan Canal has been as follows:

Amount expended by the canal commissioners	$5,133,062 21
Amount expended by the canal trustees	1,424,619 29
Total	6,557,681 50

I have also examined the account of sale of canal lands and the receipts therefrom, and find as follows:

Sales by canal commissioners prior to act of February 23, 1843	$932,407 91
Sales by State trustees after act of February 23, 1843	219,656 88
Sales by canal trustees after act of February 23, 1843	4,706,482 68
Sale by canal commissioners, after expiration of trust, to December 1, 1878	27,492 21
Total receipts for canal lands	5,886,039 68

I have also examined the accounts of net earnings of the canal and find as follows:

Net receipts over expenses of operating by canal trustees	$2,392,145 95
Net receipts over expenses of operating by canal commissioners	541,545 79
Total net earnings	2,933,691 74
Add receipts from canal lands, as above	5,886,039 68
Total receipts	8,819,731 42
Deduct cost of construction of canal, as above	6,557,681 50
Receipts over cost of canal	2,262,049 92

Which is respectfully submitted.

DANIEL C. JENNE,
Chief Engineer.

I have examined the above figures and find them to be correct.

WM. MILNE,
Chief Clerk.

WILLIAM THOMAS, Esq.,
General Superintendent Illinois and Michigan Canal.

Between December, 1865, and July, 1871, the canal was deepened by excavating the "bench" or summit level between Bridgeport and a point 2 miles above Lockport. The average vertical cut was 8 feet; that is, from 2 feet above the city datum at Chicago to 6 feet below.

This work was done by the city of Chicago under the provisions of an act of the legislature of Illinois approved February 16, 1865.

Authorities differ as to the actual cost of this work paid by the city of Chicago.

Mr. William Thomas, formerly superintendent of the canal, gives it as $3,306,658.89.

The board of public works of the city of Chicago, in their report for 1871, state it at $3,330,883.71, which is probably correct.

To reimburse the city of Chicago for the cost of this excavation, section 4 of the act of February 16, 1865, gave the city a lien upon the

canal and its revenues to the extent of $2,500,000 and interest, and provided for payment out of the earnings of the canal.

After the great fire in Chicago, the legislature of Illinois, for the purpose of relieving this lien, and at the same time aiding the distressed city, on the 20th October, 1871, appropriated the sum of $2,955,340, with interest until paid.

This expenditure was not included in the foregoing statement of the cost of the canal, but the Board sees no good reason for omitting it, and therefore includes it in the following revised statement, viz:

Amount of original cost of construction	$6,557,681 50
Amount refunded to the city of Chicago	2,955,340 00
Total cost	9,513,021 50

This sum is too small, however, by whatever amount has been paid by the State as interest under the provision of section 4 of the act of October 20, 1871. Concerning this amount (if any) the Board has not received any information.

According to the foregoing statement, the net receipts down to December 1, 1878, were	$8,819,731 42
Since that time, according to the annual reports of the board of canal commissioners, the expenses have exceeded the receipts to December 1, 1885, by	14,651 13
Net receipts to December 1, 1885	8,805,080 29
Amount received from land sales to December 1, 1878	5,886,039 68
Amount received from land sales between December 1, 1878, and December 1, 1885, as shown by the annual reports of the canal commissioners	6,668 28
Total to December 1, 1885	5,892,707 96

It thus appears that up to and including November 30, 1885, the State of Illinois has expended on the canal the sum of at least $3,620,313.54 more than has been received from the sale of the lands granted, or $707,941.21 more than the net receipts from all sources of revenue, interest account not included.

The sources of revenue are tolls, leases of water-power, leases of "90-foot strip" and lots, ice leases, sales of lots and lands, sales of "spoil-bank" stone, sales of clay, and miscellaneous.

The following table exhibits the business of the canal for twenty-six years:

TABLE 11.—*Statement of number of canal-boats running, of miles run, of clearances issued, and of tons transported on the Illinois and Michigan Canal during twenty-six years, viz, from* 1860 *to* 1885, *inclusive.*

Date.	Clearances issued.	Boats running.	Miles run.	Tons transported.	Date.	Clearances issued.	Boats running.	Miles run.	Tons transported.
1860	3,926	201	235,684	367,437	1873	*4,743	172	328,174	849,533
1861	6,339	194	415,599	547,295	1874	*4,296	152	288,075	712,020
1862	7,044	211	474,976	673,590	1875	*3,554	142	259,878	676,025
1863	5,810	240	418,713	619,599	1876	*4,049	145	302,024	691,943
1864	4,527	228	300,340	510,286	1877	*4,008	145	272,788	605,912
1865	3,907	228	360,614	616,140	1878	*4,299	140	293,335	598,792
1866	5,488	230	406,784	746,815	1879	*4,458	136	304,191	669,559
1867	4,183	209	357,623	746,954	1880	*4,536	133	320,009	751,360
1868	4,128	218	345,169	737,827	1881	*4,459	133	316,435	826,133
1869	4,524	219	285,050	817,738	1882	*4,055	132	335,710	1,011,287
1870	2,903	27[illegible]	242,650	585,870	1883	*3,789	132	306,618	925,575
1871	3,523	186	278,948	629,975	1884	*4,204	134	325,431	956,721
1872	*5,018	173	334,820	783,641	1885	*3,990	†135	304,664	827,355

* Includes clearances at Henry and Copperas creeks.
† Of this number 27 are steam canal-boats and 8 are tugs.

The following table exhibits the business in detail for the season of 1885, and is inserted for the purpose of showing the varied character of the freight transported:

TABLE 12.—*Statement of articles cleared Illinois and Michigan Canal and locks at Henry and Copperas Creek for the year ending November* 30, 1885.

Articles.	Canal.	Lock. at Henry.	Lock at Copperas Creek.
Flour ..... barrels..	103, 680	652	.....
Lime:			
Common ..... do	468	44	.....
Hydraulic ..... do	144	15	.....
Oil ..... do	68	19	.....
Salt ..... do	893	101	255
Corn ..... bushels ..	1, 954, 993	126, 000	14, 042
Oats ..... do	805, 546	13, 500	1, 000
Potatoes ..... do	303	.....	.....
Rye ..... do	18, 885	1, 844	.....
Wheat ..... do	835, 020	2, 064	4, 953
Agricultural implements ..... pounds..	500	.....	.....
Carpenter and joiner's work ..... do	22, 160	.....	.....
Coal ..... do	14, 318, 500	496, 000	488, 000
Clay ..... do	47, 971, 975	.....	.....
Drainage pipe ..... do	2, 881, 055	.....	.....
Empty barrels ..... do	44, 400	4, 270	1, 470
Furniture, household ..... do	16, 390	.....	.....
Hay and straw ..... do	218, 000	.....	70, 000
Iron, all kinds ..... do	165, 156	.....	.....
Ice ..... do	60, 562, 000	84, 080, 000	4, 400, 000
Merchandise, including dry goods, groceries, hardware, cutlery, crockery, and glassware, pounds	287, 422	90, 358	12, 994, 551
Meal ..... pounds..	171, 650	.....	.....
Machinery ..... do	74, 350	600	100, 000
Nails and spikes ..... do	15, 850	.....	.....
Sand and gravel ..... do	49, 280, 100	.....	.....
Seeds ..... do	63, 710	.....	.....
Wagons and other vehicles ..... do	53, 150	3, 000	.....
All other articles not enumerated ..... do	1, 350, 785	77, 119	10, 000
Brick ..... number..	1, 870, 500	.....	.....
Lath ..... do	4, 202, 100	.....	.....
Passengers ..... do	.....	.....	1, 918
Posts and rails ..... do	40, 032	.....	.....
Railroad ties ..... do	27, 645	.....	28, 880
Shingles ..... do	17, 149, 500	8, 000	.....
Flooring ..... feet..	189, 711	.....	.....
Lumber (board measure) ..... do	24, 646, 375	.....	34, 660
Siding ..... do	47, 738	.....	.....
Stone:			
Dimension, rough ..... cubic yards..	59, 523	4	.....
Dressed ..... do ..	5, 157	.....	.....
Riprap ..... do	35, 767	.....	.....
Rubble ..... do	213, 579	.....	.....
Wood ..... cords..	949	5	.....
Boats ..... miles..	301, 788	2, 492	384

The cost of operating the canal from 1848 to 1885, both inclusive, is given in the following table:

TABLE 13.—*Exhibit from* 1848 *to* 1885, *inclusive.*

Year.	Ordinary repairs.	Extraordinary repairs, renewals, and hydraulic work.	Gross expenses.	Tolls.	Canal opened.	Canal closed.	Number of days open.
1848	$36,452	$6,744	$43,197	$87,890	Apr. 19	Nov. 29	224
1849	43,922	26,999	70,922	118,375	Apr. 20	Dec. 9	231
1850	38,418	19,996	58,415	125,504	Mar. 22	Dec. 6	259
1851	39,447	19,027	58,475	173,300	Mar. 15	Dec. 8	269
1852	42,816	10,692	33,508	168,577	Mar. 29	Dec. 8	255
1853	40,383	4,486	44,870	173,372	Mar. 14	Dec. 12	274
1854	36,587	16,654	43,242	198,326	Mar. 15	Dec. 2	263
1855	38,216	32,657	70,873	180,519	Apr. 3	Dec. 12	253
1856	33,101	58,357	91,458	184,310	Apr. 8	Dec. 4	241
1857	37,256	65,825	103,082	197,830	May 1	Nov. 20	204
1858	36,115	21,972	58,088	197,171	Apr. 1	Dec. 1	244
1859	34,026	40,406	74,432	132,100	Mar. 16	Dec. 3	264
1860	34,308	48,275	82,583	138,554	Mar. 8	Nov. 26	264
1861	39,238	15,823	55,061	218,040	Mar. 4	Nov. 28	270
1862	40,024	15,337	55,362	264,657	Apr. 1	Dec. 3	247
1863	49,294	13,021	62,715	210,386	Mar. 4	Dec. 1	271
1864	47,535	18,572	66,107	156,607	Mar. 10	Dec. 1	265
1865	39,255	85,614	124,869	300,810	Apr. 10	Nov. 15	218
1866	43,716	72,647	116,363	302,958	Apr. 11	Oct. 31	303
1867	46,152	116,504	162,656	252,231	Apr. 10	Nov. 15	209
1868	52,984	69,067	122,052	215,750	Apr. 4	Oct. 31	210
1869	49,514	42,251	91,765	238,759	Apr. 7	Nov. 15	222
1870	43,098	65,597	108,695	149,635	Apr. 7	Oct. 8	184
1871	54,555	42,667	97,222	159,050	Apr. 6	Nov. 25	234
1872	42,785	46,090	88,876	165,874	Apr. 1	Dec. 1	245
1873	[1]53,525	27,573	81,098	166,641	Apr. 10	Nov. 20	225
1874	[2]49,139	24,659	73,798	144,831	Mar. 30	Nov. 20	236
1875	[3]46,241	28,270	74,511	107,081	Apr. 15	Nov. 28	228
1876	[4]42,418	49,167	91,585	113,293	Mar. 25	Nov. 18	239
1877	[5]54,965	55,053	110,018	96,913	Apr. 16	Dec. 1	230
1878	[6]43,826	39,013	82,839	84,330	Mar. 20	Dec. 1	257
1879	[7]44,076	53,625	97,701	89,064	Mar. 29	Nov. 20	237
1880	[8]47,[illegible]04	77,997	125,601	92,296	Mar. 22	Nov. 18	242
1881	[10]53,597	54,626	108,223	85,130	Apr. 25	Nov. 26	216
1882	[11]57,309	48,103	105,412	85,947	Mar. 13	Nov. 30	263
1883	[12]56,515	60,241	116,756	77,975	Apr. 2	Nov. 25	238
1884	[13]55,731	43,549	99,280	77,102	Apr. 7	Dec. 1	239
1885	[14]47,659	38,734	86,393	66,800	Apr. 15	Nov. 25	225

NOTE.—The figures in the above table, from 1848 to May 1, 1871, are as given by the trustees of the Illinois and Michigan Canal.

[1] In this amount is $15,400, paid collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs $38,125.

[2] In this amount is $15,399, paid collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to maintenance and repairs $33,740.

[3] In this amount is $14,523, paid collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs $31,718.

[4] In this amount is $12,757 paid collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs $29,661.

[5] In this amount is $12,825, paid collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs $42,140.

[6] In this amount is $12,954, paid collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs $30,872.

[8] In this amount is $14,592, paid collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs, $29.484.

[9] In this amount is $15,273, paid collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs, $32,331.

[10] In this amount is $18,299, paid collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs, $35,298.

[11] In this amount is $18,937, paid to collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs, $38,732.

[12] In this amount is $21,241, paid to collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs, $35,274.

[13] In this amount is $22,413, paid to collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs, $33,318.

[14] In this amount is $16,157, paid to collectors, lock-tenders, and incidentals, which would leave the amount properly chargeable to ordinary repairs, $31,502.

The leases in effect at the close of 1885 are shown in the following table:

TABLE 14.—*Statement showing leases of water-power, "90-foot strip," lots and lands, and ice on the Illinois and Michigan Canal; also contracts for clay, "spoil-bank," and other stone.*

[NOTE.—In all leases of "90-foot strip" a provision is made for using the ground for enlargement of canal.]

Description of lease.	Date of instrument or last renewal.	Time.	Lessee.	Yearly rental.	Remarks.
LEASES OF WATER-POWER.					
Three runs of stones and lot 1, block 122, Lockport.	July 2, 1873	20 years from Mar. 4, 1873	Norton & Co	$330 00	Provision for renewal. (Provision made for cancelling lease when, in opinion of legislature, the same is not of advantage to State, under act of March 27, 1874.)
Two runs of stones and lot 6, block 122, Lockport.	July 2, 1873	20 years from May 1, 1873	do	230 00	Do.
Surplus water at Lockport	Sept. 10, 1886	20 years from July 1, 1886	do	3,300 00	Do.
Water at Dam No. 1, Joliet, and lots connected therewith.	Aug. 10, 1876	20 years from July 17, 1876	George W. Hyde	1,362 20	Do.
5,834 cubic feet at Dam No. 2, Joliet	Sept. 11, 1883	10 years from July 1, 1883	John E. Bush.	329 14	Do.
12,795 cubic feet at Dam No. 2, Joliet	Sept. 11, 1883	do	Henry A. Sanger	721 98	Do.
6,000 cubic feet at Dam No. 2, Juliet	Jan. 7, 1886	10 years from Jan. 1, 1886	do	423 18	Do.
5,286 cubic feet on Channahon level below Joliet.	Sept. 11, 1883	10 years from July 1, 1883	Northwestern Tile Company	551 15	Do.
3,651 cubic feet on Channahon level below Joliet.	Sept. 11, 1883	do	Marsh & Speer	382 30	Do.
2,991 cubic feet on Channahon level below Joliet.	Sept. 11, 1883	do	William M. Druley, S. P., &c	331 96	Do.
Surplus water at Channahon	May 7, 1885	10 years from May 1, 1885	Oren S. Hurlbert	100 00	Do.
Surplus water at Ottawa	May 1, 1872	20 years from May 1, 1872	Ottawa Hydraulic Company.	750 00	Do.
LEASES OF "90-FOOT STRIP."					
In secs. 30, 39, 14, Bridgeport	Apr. 17, 1884	10 years from October 1, 1882	Thurber & St. John	50 00	Used for dry-dock.
In secs. 31, 39, 14, Bridgeport	Apr. 17, 1884	10 years from Apr. 17, 1884	Pouliot & Goulette	50 00	Used for dry-dock.
In secs. 35, 39, 13	Apr. 10, 1883	10 years from Apr. 10, 1883	Chicago and Alton R. R. Co.	25 00	Used for coaling station.
In secs. 32, 38, 12, Willow Springs	July 10, 1884	5 years from July 1, 1884	John A. McCulloch*	10 00	Used for restaurant stand.
Do	do	do	George W. Beebe*	10 00	Do.
In secs. 30, 37, 11, Lemont	Sept. 18, 1885	5 years from Sept. 18, 1885	Singer and Talcott Stone Co	25 00	Used for dock, loading stone.
In secs. 25, 37, 10, Lemont	Nov. 16, 1882	10 years from Nov. 9, 1882	John Reardon	50 00	Do.
In secs. 34, 36, 10, Lockport Township	July 19, 1877	10 years from May 10, 1877	Sanger & Moody	25 00	Do.
In secs. 3, 35, 10, North Joliet	July 13, 1882	10 years from July 1, 1882	Joliet Steel Company†	100 00	Used for ore and stone dock.
Do	do	10 years from Aug. 28, 1882	Houck & Brown	10 00	Used for tannery dock.
In secs. 29, 34, 8, Aux Sable	Jan. 20, 1879	10 years from Jan. 20, 1879	Richard Hughes	25 00	Leased for stone dock (not used).
In secs. 9, 33, 9, Kankakee feeder	Oct. 24, 1876	10 years from Oct. 24, 1876	M. Truby & Son	10 00	Leased for warehouse (not used).
In secs. 3, 33, 7, Morris	Aug. 7, 1879	10 years from Aug. 7, 1879	City of Morris	20 00	Leased by city of Morris to keep off squatters.
Do	Feb. 23, 1881	10 years from Feb. 23, 1881	Allen Paper Car Wheel Co	100 00	Used for company's business dock.

*These leases contain provision allowing canal commissioners to cancel at any time.
†This leases contains provision allowing either party to terminate on 90 days' notice.

TABLE 14.—*Statement showing leases of water-power, "90-foot strip," lots and lands, and ice on the Illinois and Michigan Canal, &c.*—Continued.

Description of lease.	Date of instrument or last renewal.	Time.	Lessee.	Yearly rental.	Remarks.
LEASE OF "90-FOOT STRIP"—continued.					
In secs. 9, 33, 7, Morris	Feb. 7, 1879	10 years from Feb. 7, 1879	Charles H. Goold	$5 00	Used for pasture land.
In secs. 23, 24, 33, 5, Seneca	Apr. 16, 1880	10 years from Apr. 16, 1880	Henry Bilharz	50 00	Used for store building.
In secs. 8, 33, 2, Utica	Aug. 28, 1880	10 years from Aug. 28, 1880	H. S. Gilbert & Co	25 00	Used for warehouse and lumber yard.
Do	June 12, 1884	10 years from June 12, 1884	James Clark	25 00	Used for warehouse and cement dock.
In secs. 9, 33, 2, Utica	....do	10 years from June 1, 1884	.....do	50 00	Used for cement dock.
Do	....do	10 years from July 1, 1884	E. F. Pulsifer	50 00	Used for warehouse and lumber yard.
In secs. 15, 33, 1, La Salle	Aug. 7, 1884	10 years from Aug. 1, 1883	Frederick W. Matthiessen	100 00	Used for warehouse.
LEASES OF LAND AND LOTS.					
S. ½ lot 7, block 35, secs. 21, 39, 14, Chicago	Nov. 23, 1885	10 years from Nov. 23, 1885	Wallace Heckman*	175 00	Buildings for rent on lot.
N. ½ lot 7, block 35, secs. 21, 39, 14, Chicago	Nov. 23, 1885	.....do	Julia Wilson*	75 00	Do.
Lots 8 and 9, block 12, secs. 29, 39, 14, Bridgeport	Jan. 5, 1882	10 years from Sept. 2, 1882	Philip D. Armour*	5,100 00	Elevator on lots.
Block 13, secs. 29, 39, 14, Bridgeport	Jan. 14, 1886	10 years from Jan. 1, 1886	Joliet Steel Company*	500 00	Ore dock and railroad track on lot.
Ground at Bridgeport	June 15, 1882	10 years from June 15, 1882	Jefferson Carson*	1,500 00	Lumber yard.
Block A, Bridgeport	Jan. 7, 1886	5 years from Jan. 1, 1886	Mary Sheahan*	100 00	Building on lot.
Strip of ground near mill, Lockport	July 11, 1878	10 years from Mar. 4, 1878	Norton & Co.*	10 00	Mill purposes.
Lots 2, 3, and 5, block 122, and ground near mill, Lockport.	Sept. 13, 1882	10 years from July 1, 1882	.....do	190 00	Paper and flour mill purposes.
Lots 1 and 2, block 2, North Joliet	Jan. 11, 1883	10 years from Jan. 11, 1883	Stanton & Stage	25 00	Ice-house on lots.
Ground in SW. ¼, secs. 17, 34, 9, Channahon	Apr. 17, 1884	10 years from Apr. 11, 1884	Albert T. Randall*	21 00	Used for pasture land.
Lot marked "dry-dock," Morris	Jan. 10, 1884	10 years from Dec. 22, 1883	Ohio Butt Company	100 00	Dock purposes.
ICE LEASES.					
Above Dam No. 1, Joliet	Jan. 7, 1886	5 years from Nov. 17, 1885	Edwin Porter	40 00	Only gives right to cut and remove.
Above Dam No. 1, Joliet, and below guard lock	Oct. 18, 1884	5 years from Nov. 17, 1884	.....do	56 00	All the ice that may be formed therein.
Pool of dam at Channahon	Dec. 11, 1884	.....do	Jesse L. Watson	10 00	Do.
10,000 feet of canal at Morris	Oct. 18, 1884	.....do	Abraham Loyd	175 00	Do.
2,000 feet of canal at Morris	Oct. 18, 1884	.....do	Lewis Gebhard	75 00	Do.
2 miles of canal at Seneca	Dec. 11, 1884	.....do	Daniel Shaid	50 00	Do.
12,000 feet of canal, feeder and side cut, at Ottawa.	Dec. 11, 1884	5 years from Nov. 17, 1884	Henry Holmes	300 00	Do.
3,000 feet of canal at Ottawa	Oct. 18, 1884	.....do	David Sanderson	126 00	Do.
1,000 feet of canal below Lock 12	Jan. 8, 1885	.....do	County of La Salle	5 00	Do.
1,000 feet of canal at Utica	Dec. 11, 1884	.....do	William P. Dixon	10 00	Do.
4,000 feet of canal above aqueduct, La Salle	Dec. 11, 1884	.....do	Eliel Brewing Company	50 00	Do.
1,000 feet of steamboat channel at La Salle	Jan. 8, 1885	.....do	M. & W. Callahan	112 50	Do.

CLAY CONTRACTS.					
Clay on bank of canal between Kedzie avenue and Belt Railroad crossing.	Mar. 11, 1882	5 years from Mar. 11, 1882	T. & J. D. T. Tully	.....	Monthly payments as taken; aggregate amount not to be less than $750 per year.
Between Western avenue and Grand Trunk crossing.	Jan. 17, 1883	5 years from Jan. 17, 1883	Philip Lichtenstadt	.....	Do.
"SPOIL-BANK" STONE.					
Spoil-bank stone on banks of canal between Lockport and Lemont.	Apr. 9, 1880	10 years from Apr. 9, 1880	James Bruce & Co	.....	Monthly payments; at least 2,500 cords per year to be taken.
STONE IN "90-FOOT STRIP."					
All stone in strip opposite their land in sections 20, 37, 11, Lemont.	Oct, 3, 1871	No time given in which to take stone.	Singer & Talcott Stone Company.	.....	$1,000 paid at time contract was made. in full payment; think this stone is nearly all excavated.
All stone in strip opposite their land in sections 20 and 21, 37, 11, Lemont.	Jan. 28, 1873	.....do	Illinois Stone Company	.....	$5,049 paid in full at time contract made; stone on one side of canal, at least, nearly taken out.

* Enlargement of canal would not affect the ground.

The canal lots and canal lands remaining unsold November 30, 1885, with an estimate of their value, are shown in the following table:

TABLE 15.—*Unsold canal lots November* 30, 1885.

Lots.	Block.	Valuation.
Chicago.		
Being in canal commissioner's subdivision of that part of southwest ¼, section 29, township 39, range 14 east, lying south of the main canal, west of Chicago River, and known as blocks 12 and 13 of canal trustees' subdivision of blocks 10, 10½, 11, 12, and 13, southwest ¼, section 29-39-14. Also block A, not previously surveyed or platted in said southwest ¼ section, and east of Chicago River:		
1, 2	12	[1]$50,000
1, 2	12½	[1]50,000
.....	13	12,000
.....	A	1,000
In canal trustees' new subdivision east fraction southeast fractional ¼, section 21-39-14:		
7	35	6,000
Total		119,000
Lockport.		
1, 2	71	[2]$10,000
4, 5	102	[3]3,000
1, 2, 3	103	[3]1,000
3	114	200
2	116	[4]800
5, 6, 7, 8, 9, 10, 11, 12	121	2,400
1, 2, 3, 4, 5, 6	122	3,000
1, 2, 3, 4, 5	123	2,000
2, 3, 6, 7	124	400
1, 2, 3, 4	125	400
1, 2, 3, 4	126	200
2, 3, 6, 7	[illegible]7	200
2, 3, 6, 7	128	200
1, 2, 3	129	150
.....	131	25
.....	134	50
.....	135	100
		24,925
Joliet.		
Northeast ¼ section 9, township 35, range 10 east 3d P. M., "North Joliet," as laid out by the canal trustees:		
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11	1	220
1, 2, 3, 4, 5, 6, 7, 8, 9, 10	2	200
4, 5, 6, 7, 8	3	200
10	5	[4]600
11, 12, 13, 14, 15, 16	37	2,500
Old town of Joliet, east part lot 5, called "McKee tract"	16	3,000
		6,720
Du Page (now called Channahon).		
8, 9 (worth nothing; inundated)	4	.....
3	16	10
1, 2	21	40
... (worth nothing; inundated)	51	.....
		50
Kankakee.		
Blocks 30, 31, 32, 33, 34, 37, 38, 39, 40, 41, and 42, being in section 31, township 34, range 9 east, 3d P. M., containing 16.32 acres, at $25 per acre	.....	408
Morris.		
Lying between canal and Illinois River	13	200

[1] Includes buildings, viz: Collector's office, two houses, and hydraulic building.
[2] Includes buildings, viz: Canal office, house, and barn.
[3] Includes buildings, viz: Shops at State yard, barn, blacksmith shop, &c.
[4] Includes building, viz: Lock-house.

TABLE 15.—*Unsold canal lots November* 30, 1885—Continued

Lots.	Block.	Valuation.
Canal trustees' addition to Morris.		
Block marked on plat as "Dry Dock"		$1,000
		1,200
Ottawa—Original Town.		
1, 2, 3, 4, 5, 6, 7, 8	20	10
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	21	4,000
1, 2, 3, 4, 5, 6	22	600
	23	600
	24	300
	25	500
	26	500
	27	400
	28	50
		6,960
State's addition to Ottawa.		
3, 4, 5	38	[1]3,500
6	43	200
		10,660
La Salle.		
9	41	200
2, 4, 7, 10, 11, 12	45	500
8, 14	101	50
1, 2, 3	141	1,200
1, 2, 3	142	750
		2,700

[1] Including buildings, viz: State shop, barn, sheds, lock-tender's house, &c.

Unsold canal lands November 30, 1885.

Description.	Section.	Town.	Range.	Acres.	Valuation per acre.	Valuation of tract.
Three small islands	15	33	4			$5 00
Part of island in north half	17	33	4			5 00
Island in section	1	33	7	13.09	$1 00	13 09
Strip in	1 and 12	38	12	2.25	1 50	337 50
Total						360 59

RECAPITULATION.

Canal lots.	Valuation.
Chicago, 7	$119,000 00
Lockport, 54	24,925 00
Joliet, 34	6,720 00
Du Page, 6	50 00
Kankakee, 11	408 00
Morris, 2	1,200 00
Ottawa, 36	10,660 00
La Salle, 15	2,700 00
Total	165,663 00
Unsold lands	360 59
Grand total	166,023 59

The rates of tolls and lockage in force in 1885 are given in the following table:

TABLE No. 16.—*Rates of toll and lockage established upon the Illinois and Michigan Canal, and the locks at Henry and Copperas Creek in the Illinois River, by resolution of the Board of Canal Commissioners, passed February* 5, 1885, *to take effect upon opening of navigation.*

On freight boats, per mile, on the canal, 3 cents.

On freight boats, lockage at Henry and Copperas Creek, per ton measurement at each lock, 1 cent; *Provided,* That no single lockage shall be made for less than $1.50, and also that no steamboat shall be rated at over 500 tons.

Toll is to be computed upon the weight (1,000 pounds per mile) of all articles contained in the following list, unless otherwise stated.

Lockage at Henry and Copperas Creek to be computed upon the weight (per 1,000 pounds), unless otherwise stated.

Articles.	Tolls.		Lockage.	Articles.	Tolls.		Lockage.
	Through freight.	Local freight.			Through freight.	Local freight.	
	Mills.	*Mills.*	*Cts.*		*Mills.*	*Mills.*	*Cts.*
Beans	2	2	3	Lime, common	1	1	2
Barley	1⅓	1⅓	3	Lime, hydraulic	1	1	2
Buckwheat	1⅓	1⅓	3	Lead, pipe, sheet, and roll, pigs and bars.	1½	2	3
Bran	2	2	3				
Bark, tanners'	1	1	1½	Land plaster, bone-dust, and superphosphate.	1	1	1
Barrels, empty	2	2	3				
Cotton, raw, in bales	1	1	3	Merchandise (including hardware, dry goods, cutlery, groceries, crockery, and all other articles not specified).	2	2	3
Corn	1⅓	1⅓	3				
Charcoal	1	2	3				
Coal, per ton per mile	7–10	1	1				
Coke	⅔	⅔	3	Meal	1⅓	1⅓	3
Clay	⅔	⅔	3	Machinery	2	2	3
Drainage pipe	1	1	3	Oats	1⅓	1⅓	3
Flour	2	2	3	Rye	1⅓	1⅓	3
Furniture, household	2	2	3	Salt, in sacks or barrels	1	1⅓	2
Hay and fodder	2	2	3	Seeds	2	2	3
Hemp	2	2	3	Shorts and screenings	2	2	3
Hoops, and material for	2	2	3	Shipstuff	2	2	3
Hubs, boat-knees, and bolts	2	2	3	Staves and heading	1⅓	1⅓	3
Iron, pig, scrap, and railroad	¾	¾	2	Sand, and other earth	⅔	⅔	1
Iron, wrought and cast	2	2	3	Wheat	1⅓	1⅓	3
Ice	1⅓	2	1½	Zinc, spelter	2	2	3
Iron ore	½	½	2				

TABLE 17.

[On the following articles toll per mile and lockage will be computed by number or measure.]

Articles.	Tolls in mills.		Lockage in cents.
	Through freight.	Local freight.	
On each 1,000 feet of lumber ..... per mile..	4½	5	5
On each 1,000 feet of dressed flooring ..... do.....	3	4	5
On each 1,000 feet of siding ..... do.....	1½	2	2½
On each 1,000 lath ..... do.....	¾	1	1¼
On each 1,000 shingles ..... do.....	2–5	½	1
On each 1,000 brick ..... do.....	2	3	5
On each 100 split posts (not over 5 inches in diameter) or fence rails, per mile	3	4	5
On each 100 railroad ties ..... per mile..	15	20	8
On each cord of wood for fuel* ..... do.....	8	10	8
On each cubic yard (27 cubic feet) dressed or sawed stone† ..... do.....	7	10	15
On each cubic yard (27 cubic feet) rubble-stone† ..... do.....	4	5	10
On each cubic yard (27 cubic feet) dimension stone† ..... do	6	8	15
On each cubic yard (27 cubic feet) McAdam stone† ..... do.....	2	2	9
Passengers ..... do.....	.....	.....	5

"Through freight is that which is cleared from Copperas Creek or Henry to Chicago, or from Chicago to Henry or Copperas Creek.

"Local freight" includes all other freight.

*Provided that on wood transported over 40 miles the tolls shall not exceed 40 cents per cord. All timber on boats shall be taken board measure.

†Provided that on stone transported over 30 miles the tolls shall not exceed 15 cents per cubic yard on macadam and rubble, and 25 cents per cubic yard on dimension and dressed or sawed stone.

Provided that on clearances from Chicago to Copperas Creek, or from Copperas Creek to Chicago, the lockage on boat and cargo shall be one-half the above rates at each lock, provided the cargo is not transferred before reaching destination as cleared.

Provided that boats passing both locks in the Illinois River shall be charged one-half the above rates of lockage at each lock on boat and cargo.

Boats entering the canal at La Salle, and passing out again without proceeding as far as Ottawa, shall be charged $1 each, if the toll on boat and cargo at above rates should not amount to $1.

The toll on stone shipped from any point on the canal through Henry lock will be figured at through rates.

The weight of a box, rate, vessel, or thing in which any article may be contained shall be added to the weight of the article itself and toll computed accordingly.

Duplicate bills of lading required in all cases, one to be deposited with the collector to whom toll or lockage is paid.

N. B.—The attention of all masters and shippers is hereby directed to the following sections of the rules, by-laws, and regulations of the Illinois and Michigan Canal, to wit: Sections 55 to 63 inclusive, and the rules established for the lockage of boats at Henry and Copperas Creek.

TABLE 18.

By resolution dated April 9, 1885, the rate of toll on grain to Chicago was fixed at one mill per 1,000 pounds per mile, and no lockage at Henry or Copperas Creek; and the following rates of toll on lumber, flooring, siding, laths, and shingles from Chicago were adopted for the season of 1885:

Station.	Lumber.	Flooring.	Siding.	Lath.	Shingles.
	Cents.	*Cents.*	*Cents.*	*Cents.*	*Cents.*
Lemont	10	8.0	4.0	2.0	1.0
Lockport	12	9.6	4.8	2.4	1.2
Joliet	13	10.4	5.2	2.6	1.3
Bird's Bridge	14	11.2	5.6	2.8	1.4
Channahon	15	12.0	6.0	3.0	1.5
Morris	17	13.6	6.8	3.4	1.7
Seneca	18	14.4	7.2	3.6	1.8
Marseilles	19	15.2	7.6	3.8	1.9
Ottawa	20	15.0	8.0	4.0	2.0
Utica	22	17.6	8.8	4.4	2.2
La Salle	23	18.4	9.2	4.6	2.3
Henry and below	23	18.4	9.2	4.6	2.3

By resolution of June 15, 1885, the rates to Henry and below were reduced as follows:

	Cents.
Lumber	16.0
Flooring	12.8
Siding	06.4
Lath	03.2
Shingles	01.6

And on grain from Henry and below, $\frac{9}{16}$ of 1 mill per 1,000 pounds per mile, and $1\frac{1}{2}$ cents per 1,000 pounds lockage; from points north of Henry, $\frac{5}{8}$ of 1 mill per 1,000 pounds per mile.

ACQUISITION OF THE CANAL.

The question of the acquisition of the Illinois and Michigan Canal arises from the provisions of the following act of the general assembly of the State of Illinois, approved April 28, 1882, viz:

AN ACT ceding the Illinois and Michigan Canal to the United States.

SECTION 1. *Be it enacted by the people of the State of Illinois, represented in the general assembly,* That the Illinois and Michigan Canal, its right of way and all its appurtenances, and all right, title, and interest which the State may now have in any real estate ceded to the State by the United States for canal purposes, be, and are hereby, ceded to the United States for the purpose of making and maintaining an enlarged canal and water-way from Lake Michigan to the Illinois and Mississippi rivers; and this cession is made upon the condition that the United States shall, within five years from the time this act takes effect, accept this grant, and thereafter maintain the said canal and water-way for the purpose aforesaid. In case the United States shall accept this grant, it is upon the express condition that the canal shall be enlarged in such manner as Congress may determine, and be maintained as a national water-way for commercial purposes, to be used by all persons, without discrimination, under such rules and regulations as Congress may prescribe; and the real estate aforesaid, hereby conveyed to the United States, shall be used, and the avails thereof applied, to carry out the object of this grant, and for no other purpose, in such manner as Congress may determine.

SEC. 2. The general assembly shall have power to withdraw and revoke this proposed grant at any time previous to its acceptance by Congress; but when the United States, by act of Congress, shall accept the grant and conditions provided for by section 1 of this act, the governor shall immediately thereafter execute and deliver, in the name of the State of Illinois, to the United States, a deed of cession in accordance with the provisions of this act, and shall then and there, or as soon as practicable, surrender all property mentioned in this act, to be granted to the proper authorities of the United States; and until the delivery of such deed, and acceptance of the same (together with the property conveyed) by the United States, the authority and duty of the State of Illinois to operate said canal, and control its property and appurtenances, shall in no respect be impaired.

SEC. 3. This act shall not take effect until it shall first have been submitted to a vote of the people of the State of Illinois at the general election to be held on Tuesday, the 5th day of November, A. D. 1882, and have been approved by a majority of all the votes polled at such election. At the said election the ballots, in so far as they relate to this act, shall be in the following form: "For the act ceding the Illinois and Michigan Canal to the United States," and when so voted it shall count in favor of this act, but if cancelled with ink or pencil it shall be counted against this act. The returns of the whole vote cast at said election, and of the votes for the adoption or rejection of this act, shall be made and canvassed by the same officers and in the same manner as are the returns of the votes for senators and representatives of the State of Illinois; and if it shall appear that a majority of the votes polled are "for the act ceding the Illinois and Michigan Canal to the United States," the governor shall make proclamation thereof, and this act shall take effect from and after the date of such proclamation; but if a majority of the votes cast are "against the act ceding the Illinois and Michigan Canal to the United States," then this act shall be null and void.

Approved, April 28, 1882.

It will be observed that this act of cession is coupled with the condition that the United States shall enlarge and maintain the present canal, but is silent concerning the obligations resting upon the canal,

and which will continue to attach thereto under whatsoever ownership it may pass.

The Board has made some effort to ascertain what these are, as well as the status of the right of way over certain portions of the line occupied by the canal, but without success, nor did the time within which this report must be submitted permit a full investigation of the matter, even if the requisite expert knowledge were at the disposal of the Board.

It will be further observed that the act is entirely silent concerning the works at Henry and Copperas Creek for the improvement of the navigation of the Illinois River.

It is a grave question whether the present canal should be enlarged and maintained in its entirety, and the Board has arrived at the conclusion that it should not.

In reaching this conclusion it has been governed by the following considerations:

(1) Two locks and dams are under construction by the United States on the Lower Illinois River, above which there is a stretch of 88 miles of river improved and controlled by the State of Illinois (although the United States contributed the sum of $62,359.80 towards the cost).

The act of cession does not include this stretch, and if the canal were accepted by the General Government it would thus possess and be responsible for the two ends of a very important water-route, the central portion of which would be under control of another authority.

(2) All dams below La Salle are, or are to be, provided with locks 350 feet long and 75 feet wide, a size unnecessarily large for ordinary canal-boats.

They have been designed with a view to the extension of river steamboat navigation of the first-class between the Mississippi River and Lake Michigan, and form a part of a liberal and wise project, involving the continuation of slack-water navigation from La Salle to Joliet upon the same scale.

It is true the portion of the present canal lying between these points might be enlarged and utilized, but the cost of doing so upon the scale of the improvements below La Salle would be greater than that of improving the river itself, and, even when completed, would not be as easy of navigation. (See Annual Report of Chief of Engineers, 1884, pages 1958, 1959.)

Consequently were the United States in possession of the canal, it would be judicious to abandon it between La Salle and Joliet in favor of the river.

But if the conditions of the act of cession were accepted as they now stand, the United States would be estopped from this course and compelled to enlarge the canal, notwithstanding its greater cost and less efficiency.

(3) The northern terminus of the present canal is in the south branch of the Chicago River, about five miles, by its course, from Lake Michigan.

This portion of the river lies in the very heart of the business portion of the city of Chicago, and through it all the commerce to and from the lake must pass.

Numerous bridges span this part of the river, and these are thronged day and night with a vast multitude of passing people and vehicles.

The delays and annoyances arising from the necessity for interrupting all this travel to allow vessels to pass the bridges have become almost intolerable, and will not admit of much greater increase. If, then, there

should be such increase in the commerce of the canal as is anticipated when its enlargement shall have been effected, it would be practically impossible to take care of it by the present route, without subjecting the people of Chicago to still greater annoyance.

In view of the possibilities of the case, it would appear that whatever enlargement of the canal is made from Joliet northward should not be carried further than the "Sag," a point whence the line of the canal could be easily diverted to a more favorable terminus.

The Board then presents the following reasons why the United States should not accept the cession of the Illinois and Michigan Canal under the conditions of the existing act: (1) The canal should not be enlarged upon the whole of the present line; on the contrary, it would be judicious to abandon the greater portion of it. (2) The act does not provide for the cession to the United States of that portion of the Illinois River improvement now owned by the State of Illinois, and which forms an essential part of the through line.

3d. The act is not sufficiently definite as to the obligations which the United States would assume in accepting the transfer of the canal.

Although the Board is of opinion that the United States should not accept the canal under the existing conditions, it is further of opinion that the water-route of which the canal forms a part should be controlled by the General Government, and that acceptance should promptly follow a proposition to transfer it under conditions so modified as to remove the objections stated.

In case, however, it should be deemed expedient to ignore the objections presented, and to accept the cession of the canal under the present conditions of the act authorizing the transfer, the following estimate is submitted of the cost of enlarging the canal to the dimensions of the proposed Hennepin Canal, that is to say, for a prism 80 feet wide at surface, 59 feet wide at bottom, and 7 feet deep, with locks 170 feet long, 30 feet wide, and 7 feet of water on the miter-sills:

Length, miles	97.24
Number of locks	16
Estimated cost of construction	$2,298,919 15
Estimated annual cost of maintenance and ordinary repairs	50,000 00

It is impracticable to estimate for extraordinary repairs, renewals, &c. These will have to be provided for from time to time by the necessary appropriations for that purpose.

(See Annual Report Chief of Engineers, 1883, pages 1788 and 1789.)

Respectfully submitted.

C. B. COMSTOCK,
Lieut. Col. of Engrs. and Bvt. Brig. Genl.
O. M. POE,
Lieut. Col. of Engrs. and Bvt. Brig. Gen., U. S. A.
JAS. C. POST,
Major of Engineers.

The CHIEF OF ENGINEERS, U. S. A.

List of appendices accompanying this report.

No. 1.—Acts of Congress relating to Illinois and Michigan Canal of March 30, 1822, and March 2, 1827.
No. 2.—Navigable depths on Upper Mississippi, from Maj. A. Mackenzie.
No. 3.—Acts of State of Illinois in reference to Illinois and Michigan Canal.

No. 4.—Freight rates in the vicinity of Saint Paul, furnished by the kindness of Maj. C. J. Allen, but received too late for use in the report.
No. 5.—Letters from F. Barker and E. M. Dickey in reference to freight rates on the Upper Mississippi.
No. 6.—Papers from O. Guthrie in reference to the Illinois and Michigan Canal.
No. 7.—Letter from J. C. Dove in reference to the Hennepin Canal.
No. 8.—Paper by Governor William Bross in reference to the Hennepin Canal.
No. 9.—Papers from the Enterprise Club in reference to the Hennepin Canal.
No. 10.—Papers from Governor R. J. Oglesby.
No. 11.—Papers from Citizens' Committee of Rock Island and Davenport in reference to the Hennepin Canal.
No. 12.—Map of route of Illinois and Michigan and Hennepin Canals.

APPENDIX No. 1.

CHAP. LI.—AN ACT to grant a quantity of land to the State of Illinois for the purpose of aiding in opening a canal to connect the waters of the Illinois River with those of Lake Michigan.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and hereby is, granted to the State of Illinois, for the purpose of aiding the said State in opening a canal to unite the waters of the Illinois River with those of Lake Michigan, a quantity of land equal to one-half of five sections in width, on each side of said canal, and reserving each alternate section to the United States, to be selected by the Commissioner of the Land Office, under the direction of the President of the United States, from one end of the said canal to the other; and the said lands shall be subject to the disposal of the legislature of the said State for the purpose aforesaid, and no other: *Provided*, That the said canal, when completed, shall be and forever remain a public highway for the use of the Government of the United States, free from any toll or other charge whatever, for any property of the United States, or persons in their service, passing through the same: *Provided*, That said canal shall be commenced within five years, and completed in twenty years, or the State shall be bound to pay to the United States the amount of any lands previously sold, and that the title to purchasers under the State shall be valid.

SEC. 2. *And be it further enacted*, That, so soon as the route of the said canal shall be located and agreed on by the said State, it shall be the duty of the Governor thereof, or such other person or persons as may have been, or shall hereafter be, authorized to superintend the construction of said canal, to examine and ascertain the particular sections to which the said State will be entitled under the provisions of this act, and report the same to the Secretary of the Treasury of the United States.

SEC. 3. *And be it further enacted*, That the said State, under the authority of the legislature thereof, after the selection shall have been so made, shall have power to sell and convey the whole, or any part of the said land, and to give a title in fee-simple therefor, to whomsoever shall purchase the whole or any part thereof.

Approved, March 2, 1827. (4 U. S. Stat., 234.)

CHAP. XIV.—AN ACT to authorize the State of Illinois to open a canal through the public lands, to connect the Illinois River with Lake Michigan.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the State of Illinois be, and is hereby, authorized to survey and mark, through the public lands of the United States, the route of the canal connecting the Illinois River with the southern bend of Lake Michigan; and ninety feet of land on each side of said canal shall be forever reserved from any sale to be made by the United States, except in the cases hereinafter provided for, and the use thereof forever shall be, and the same is hereby, vested in the said State for a canal, and for no other purpose whatever; on condition, however, that if the said State does not survey and direct by law said canal to be opened, and return a complete map thereof to the Treasury Department within three years from and after the passing of this act; or if the said canal be not completed, suitable for navigation, within twelve years thereafter; or if said ground shall ever cease to be occupied by, and used for, a canal, suitable for navigation; the reservation and grant hereby made shall be void and of none effect: *Provided always, and it is hereby enacted and declared*, That nothing in this act contained, or that shall be done in pursuance thereof, shall be deemed or construed to imply any obligation on the part of the United States to appropriate any money to defray the expenses of surveying or opening said canal: *Provided also, and it is hereby further enacted and declared*, That the said canal, when completed, shall be, and forever remain, a public highway for the use of the Government of the United States, free from any toll or other charge whatever, for any property of the United States, or persons in their service, passing through the same.

SEC. 2. *And be it further enacted*, That every section of land through which said canal route may pass shall be, and the same is hereby, reserved from future sale until hereafter specially directed by law; and the said State is hereby authorized and permitted, without waste, to use any materials on the public lands adjacent to said canal that may be necessary for its construction.

Approved, March 30, 1822. (3 U. S. Stat., 659.)

APPENDIX No. 2.

LETTER FROM MAJOR A. MACKENZIE, CORPS OF ENGINEERS, WITH TABLES SHOWING NAVIGABLE DEPTHS ON UPPER MISSISSIPPI RIVER.

UPPER MISSISSIPPI RIVER IMPROVEMENT,
UNITED STATES SNAGBOAT GENERAL BARNARD,
Lansing, Iowa, September 17, 1886.

DEAR GENERAL: The inclosed table for 229 days of each year, from 1879 to 1885, is made up from the gauge-readings at the points mentioned, it being assumed at each point that at zero of the gauge there would be 2 feet of water. The results are not satisfactory, for since the river has been improved there are always 3 feet from Rock Island to Saint Paul, and nearly always 3½. It is quite impossible to estimate how many days you can carry 2, 3, 4, 5, and 6 feet from La Crosse to Saint Paul and from Rock Island to La Crosse, but assuming (which is correct) that there are always 3 feet, we may use the La Crosse figures for 1885 for the river from La Crosse to Saint Paul for 4, 5, and 6 feet, and the Rock Island figures for the river from Rock Island to La Crosse.

It often happens, and may occur at any point, that the river is very shallow during a changing of channel for a week or more, and it is very difficult to keep track of cases of this kind.

Very truly,

A. MACKENZIE,
By C. W. DURHAM,
Assistant Engineer.

General C. B. COMSTOCK,
United States Engineer.

Table showing the number of days between April 1 *and November* 15, *there have been six feet, five feet, four feet, three feet, and two feet of water in river at Saint Paul, La Crosse, Dubuque, and Rock Island.*

[Two feet is taken as the depth at low water of 1864. Total number of days, 229.]

Year.	Saint Paul.					La Crosse.				
	Two feet.	Three feet.	Four feet.	Five feet.	Six feet.	Two feet.	Three feet.	Four feet.	Five feet.	Six feet.
1879	229	229	110	80	68	229	223	129	89	86
1880	229	229	151	122	112	229	229	151	124	115
1881	229	229	223	219	200	229	229	227	170	164
1882	229	229	229	222	164	229	229	223	203	161
1883	229	229	134	115	107	229	229	163	132	124
1884	229	229	205	172	127	229	229	199	170	161
1885	229	229	229	195	102	229	229	229	229	189
Average	229	229	183	161	126	229	228	189	160	143
	Dubuque.					Rock Island.				
1879	229	229	192	115	78	229	229	171	94	63
1880	229	229	229	197	132	229	229	229	167	133
1881	229	229	229	227	203	229	229	229	214	190
1882	.....	.....	.....	.....	.....	229	229	229	195	168
1883	229	229	229	204	147	229	229	229	189	139
1884	229	229	229	211	176	229	229	229	197	167
1885	229	229	229	204	179	229	229	229	213	189
Average	229	229	223	193	153	229	229	221	181	150

APPENDIX No. 3.

AN ACT to provide for the completion of the Illinois and Michigan Canal, in force April 16, upon the plan adopted by the State in 1836.

Whereas it has been represented that the city of Chicago, in order to purify or cleanse Chicago River by drawing a sufficient quantity of water from Lake Michigan directly through it, and through the Summit Division of the Illinois and Michigan Canal, would advance a sufficient amount of funds to accomplish this desirable object; and

Whereas the original plan of the said canal was to cut down the summit so as to draw a supply of water for navigation directly from Lake Michigan, which plan was abandoned for the time being, after a large part of the work had been executed, only in consequence of the inability of the State to procure funds for its further prosecution; and

Whereas under the law creating the trust the plan of the summit division of the canal was changed, the level being raised so as to require the principal supply of water to be obtained through the Calumet feeder, subject to serious contingencies, and by pumping on to the summit with the hydraulic works at Bridgeport: Now, therefore,

SECTION 1. *Be it enacted by the people of the State of Illinois, represented in the general assembly,* That to secure the completion of the Summit Division of the Illinois and Michigan Canal, upon the original "deep cut" plan, with such modifications and changes of line, is necessary, as will most effectually secure the thorough cleansing or purification of the Chicago River and facilitate the execution of the work, the city of Chicago, through its constituted authorities, may at once enter into an arrangement with the Board of trustees of said canal, with a view to the speedy accomplishment of the work.

2. The canal shall not be constructed of a less capacity than the plan adopted by the canal commissioners in 1836, nor shall the work of deepening it be prosecuted so as to materially interfere with the navigation. By consent of the Board of trustees, however, the navigation may be opened later and closed earlier than usual in former years, but it shall never be diminished to a less time than six months.

3. It shall be lawful for the city of Chicago to enter upon and use any lands which may be necessary for the right of way for said canal, if the route should in any part vary from the present line of canal, and to take and use any materials, of any description, necessary for the prosecution of the work contemplated along the line thereof; the value of the same to be determined in the mode provided by the general laws of this State.

4. The amount expended by the city of Chicago in deepening the summit division of the canal, according to the plan adopted by the Canal Commissioners in 1836, shall be a vested lien upon the Illinois and Michigan Canal and its revenues, after the payment of the present canal debt, and the net revenues of the canal shall all thereafter be applied to the payment of the principal and interest of the same expended in accomplishing the object of this act until the whole amount is reimbursed to the city: *Provided,* the cost shall not exceed two and a half millions of dollars.

5. The State of Illinois may at any time relieve this lien upon the canal revenues by refunding to the city of Chicago the amount expended in making the contemplated improvement and the interest thereon.

Approved, February 16, 1865.

UNITED STATES OF AMERICA,
State of Illinois, ss:

OFFICE OF SECRETARY.

I, Henry D. Dement, secretary of state of the State of Illinois, do hereby certify that the foregoing is a true copy of an act to provide for the completion of the Illinois and Michigan Canal, upon the plan adopted by the State in 1836, approved February 16, 1865, the original of which is now on file in this office.

In witness whereof I hereto set my hand and affix the great seal of State, at the city of Springfield, this 5th day of November, A. D. 1886.

[SEAL.]

HENRY D. DEMENT,
Secretary of State.

AN ACT to relieve the lien of the city of Chicago upon the Illinois and Michigan Canal and revenues by refunding to said city the amount expended by it in making the improvement contemplated by "An act to provide for the completion of the Illinois and Michigan Canal upon the plan adopted by the State in 1836," approved February 16, 1865, together with the interest thereon, as authorized by section 5 of said act, and to provide for issuing bonds therefor.

Whereas the city of Chicago has expended a large amount of money, to wit, the sum of two and a half millions of dollars, to secure the completion of the Summit Division of the Illinois and Michigan Canal, under and pursuant to the provisions of

said acts, so approved February 16, A. D. 1865, and acts supplementary thereto; and whereas the said city has a vested lien upon the said canal, with its revenues, subject to any canal debt existing at the time of the passage of said acts; and whereas said then existing debt due by the State has been fully paid and canceled; and whereas the canal trustees have delivered to the State of Illinois possession and control of said canal; and whereas it is provided by section 5 of said act as follows: "The State of Illinois may at any time relieve this lien upon the canal and revenues by refunding to the city of Chicago the amount expended in making the contemplated improvement and the interest thereon:" Now, therefore,

SECTION 1. *Be it enacted by the people of the State of Illinois, represented in the general assembly*, That the sum of two million nine hundred and fifty-five thousand three hundred and forty dollars, with interest thereon until paid, be, and the same is hereby, appropriated for the purpose of relieving the lien as aforesaid, being the principal expended and the interest thereon, which said sum is hereby refunded to said city, and when paid said city shall execute and deliver to the State of Illinois a proper release of said lien to the satisfaction of the Governor; and the Auditor of State, under the direction of the Governor, is hereby directed to draw his warrant for said sum of money and interest, payable only out of any moneys in the treasury belonging to the fund hereafter provided, to be known as the "Canal Redemption Fund." That for the purpose of providing said fund, any funds that are now or may be hereafter in the State treasury, paid in on the settlement of the canal commissioners with the trustees of the Illinois and Michigan Canal, as well as from the revenues of the canal; also all funds that are now or may hereafter be paid into the State treasury known as the Illinois Central Railroad Fund, shall be transferred by the State treasurer, upon the auditor's warrant drawn for that purpose, to said redemption fund; that a tax of one and one-half mills on each dollar of the assessed value of all the taxable property of the State be levied as a special tax for the years 1871 and 1872; and to meet any deficit in said revenues to meet said appropriation the Governor, Auditor, and Treasurer are hereby authorized to issue bonds of the State of Illinois to the amount of two hundred and fifty thousand dollars, said bonds to bear interest at the rate of 6 per cent. per annum, payable semi-annually in the city of New York, and shall be paid at pleasure of the State at any time after three years after the date thereof, and shall be of such denomination as the Governor may deem advisable, and be known as the "revenue deficit bonds," and shall be delivered to the city authorities of the city of Chicago, at par, as a part payment on above appropriation; *Provided, however*, That not less than one-fifth, nor to exceed one-third, of said sum so appropriated shall be received by said city, and be applied in reconstructing the bridges and the public buildings and structures destroyed by fire, upon the original sites thereof, as already provided by the Common Council, and the remainder thereof to be applied to the payment of the interest on the bonded debt of such city, and the maintenance of the fire and police department thereof.

Whereas, by reason of a great conflagration in the city of Chicago the public buildings, bridges, and other public improvements have been totally destroyed and the business of the courts is suspended, whereby an emergency exists as a reason why this act shall take effect before the first day of July next: Therefore,

Be it further enacted, That this act shall take effect and be in force from and after its passage.

Approved October 20, 1871.

UNITED STATES OF AMERICA,
State of Illinois, ss:

OFFICE OF SECRETARY.

I, Henry D. Dement, secretary of state of the State of Illinois, do hereby certify that the foregoing is a true copy of an act to relieve the lien of the city of Chicago upon the Illinois and Michigan Canal and revenues, by refunding to said city the amount expended by it in making the improvement contemplated by "An act to provide for the completion of the Illinois and Michigan Canal upon the plan adopted by the State in 1836," approved February 16, 1865, together with the interest thereon, as authorized by section five of said act, and to provide for issuing bonds therefor, approved October 20, 1871.

The original is now on file in this office.

In witness whereof I hereto set my hand and affix the great seal of State, at the city of Springfield, this 5th day of November, A. D. 1886.

[SEAL.]

HENRY D. DEMENT,
Secretary of State.

ILLINOIS AND MICHIGAN CANAL--FEEDERS.

Whereas the State of Illinois in general assembly, did, on the 16th day of February, 1865, grant and authorize the city of Chicago, in the State of Illinois, to deepen the Illinois and Michigan Canal for the purpose of, and with the intent to better the system of sewerage of the said city of Chicago by permitting a free flow of water from Lake Michigan through the Chicago River and said canal to the Des Plaines and Illinois rivers, and the city of Chicago did perfect said improvement in conformity with said permission; and

Whereas the great fire in the said city of Chicago on the 8th and 9th days of October, A. D. 1871, did so greatly damage the assessable property of a very large number of its citizens and tax-payers, and the people of the State of Illinois did by its general assembly refund to the said city of Chicago the amount of the cost of deepening the Illinois and Michigan Canal, said sum refunded being in gross $2,955,340; and

Whereas the deepening of the canal, as aforesaid, has proved to be totally inadequate for the purposes intended, and the large amount of sewage of the city of Chicago being far greater than the capacity of the canal and the water now passing through it to deodorize and render innocuous; and

Whereas the foulness of the water annually causes the death of millions of fish in the Des Plaines and Illinois rivers, that float to the shores and decay; and

Whereas said sewage, in an entirely undecomposed and putrid mass, is carried by the current of the canal into the Des Plaines River, and thence into the Illinois River, and in its foulest conditions is thus transported to and below the city of Peoria, in said State, rendering the air at all points along its passage so impure and foul as to be exceedingly offensive, and taking with it germs of disease of all kinds prevalent in the city of Chicago, and thus spreading them broadcast through the entire Des Plaines and Illinois river valleys, causing thereby much illness as well as poisoning of the blood and debilitating the system of 200,000 people; and

Whereas careful investigation leads our people to fear that an epidemic may spread over said section of the State of Illinois from the causes above stated; and

Whereas, in addition to the above distress, there has been a great loss to property, business industries, and to the communities in said region, by reason of the causes herein mentioned; and

Whereas prior to the deepening of said Illinois and Michigan Canal, the water necessary for all purposes of navigating said canal and propelling of machinery was obtained from the Des Plaines River and the Calumet feeder, through Lane's Lake; and

Whereas the bed of the Des Plaines River at the summit, and thence westward along the line of, and adjacent to, the canal, is at a low stage of water eight (8) feet above the surface level of the canal, and will average a supply of water sufficient for all canal purposes during the season of navigation; and

Whereas the supplying of the canal from these sources will so dilute and weaken the sewage of the city of Chicago as to greatly relieve it of its foulness and stench, to the great delight, relief, and health of the people near to and bordering upon the line of the canal, the Des Plaines and Illinois rivers: Therefore, be it

Resolved by the senate (*the house of representatives concurring herein*), That the Board of Canal Commissioners of the Illinois and Michigan Canal be, and they are hereby, directed to cause sluice-ways of sufficient capacity, with the proper guard-gates, to be opened from the Des Plaines River to the canal at or near the summit, in Cook County, and and at or near Lemont, in Cook County, and also to construct a dam across the former Calumet feeder at such suitable point as will cause the waters from Lane's Lake to flow into the canal; that said Canal Commissioners shall immediately commence, construct, and improve said sluices and feeders in the order named, and pay for the same out of any moneys in their hands or control as Canal Commissioners resulting from the earnings of the canal. The amount to be expended as above designated in the prosecution of said improvement shall not, however, exceed the sum of ten thousand dollars: *Provided*, That the Canal Commissioners shall first confer with the mayor and other proper authorities of the city of Chicago, and if said city shall proceed without delay to cause a flow into the canal from the Chicago River sufficient to dilute and purify the waters, and thus remedy the evils complained of, said flow to be not less than 60,000 cubic feet per minute, including the ordinary flow into the canal from the Chicago River, or so much thereof as in their judgment the said canal can carry; and if this shall be accomplished by the 1st day of September, 1881, the Commissioners shall accept it in lieu of obtaining a supply of water from the other sources named: *Provided, further*, That said Commissioners are hereby directed to take care of the 60,000 cubic feet per minute, above contemplated, if so furnished by the city of Chicago: *Provided, further*, that the adoption of this resolution shall not commit the State to a system of permanent drainage of Chicago sewerage through either the canal or Des Plaines or Illinois rivers, but that the State reserves the right to require the city of Chicago, in future years, to take care of its sew-

age through other channels: *And provided, further*, That the said city of Chicago shall erect pumping works for the purpose of causing such flow, as aforesaid, the Canal Commissioners shall allow the said city to erect said pumping works upon the Canal lands in Bridgeport, and said city shall support, control, and manage said pumping works, subject to the directions of the Canal Commissioners, relative to the amount of water to be received into the canal from time to time, as the exigencies of the canal may require, but at the expense of said city of Chicago: *Provided, further*, That the city of Chicago, its officers, agents, or employés shall derive from this resolution no right to control or exercise any authority over any of the gates, locks, or dams of said canal.

APPENDIX No. 4.

FREIGHT RATES IN THE VICINITY OF SAINT PAUL, MINNNESOTA, FURNISHED BY MAJOR CHARLES J. ALLEN, CORPS OF ENGINEERS.

WHEAT.

Duluth to Buffalo (water).—Rate of freight in 1885, 1½ cents to 5 cents per bushel; average about 3¼ cents per bushel. In 1886, 3¼ cents to 7 cents per bushel; average about 4⅜ cents per bushel.

Minneapolis and Saint Paul to Duluth.—Average rate of freight in 1885 and 1886, 9 cents per bushel; 15 cents per 100 pounds.

Minneapolis and Saint Paul, via Duluth, to New York.—Average rate of freight in 1885, 14½ cents per bushel; 23.7 cents per 100 pounds. In 1886, 18½ cents per bushel; 30.8 cents per 100 pounds.

MEM.—Canal freights Buffalo to New York are given on page 57, Annual Report Duluth Board of Trade, December 31, 1885. Copy sent. Lake freights from Chicago to Buffalo are given on page 58, same report.

WHEAT AND FLOUR.

Saint Paul and Minneapolis to Chicago, all rail. Average rate of freight.

Period.	Wheat, per 100 pounds.	Flour, per barrel.
	Cents.	*Cents.*
January to May, 1885	17½	35
May to November, 1885	15	30
November, 1885, to February, 17, 1886	17½	35
February 18, to April 8, 1886	15	30
April 8 to May 18, 1886	12½	25
May 18 to July 8, 1886	10	20
July 8 to August 1, 1886	5	10
August 1 to November 1, 1886	10	20
November 1, 1886	7½	15

Chicago to New York, all rail. Average rate of freight.

Period.	Wheat, per 100 pounds.	Flour, per barrel.
	Cents.	*Cents.*
January 1 to 21, 1885	25	50
January 22 to 31, 1885	20	40
January 31 to March 12, 1885	20	40
March to December, 1885	*22½	*45
Year 1886 to date	25	50

*Average.

COAL.

Buffalo (Lake Erie ports) to Duluth.—Rate of freight in 1885, 25 cents to 50 cents per ton. In 1886, 40 cents to $1 per ton; average, about 60 cents per ton.

MEM.—See page 16, Duluth Board of Trade Report, 1885.

Lake Erie Ports to Saint Paul and Minneapolis, via Duluth.—The average rate of freight is about $2 per ton.

The figures herein are supposed to be the published rates in effect upon the dates given. It is not unlikely that heavy shippers have had concessions or rebates made them from these figures. What, if any, cannot be ascertained.

With the exception of the rates on wheat, Duluth to Buffalo, the information given here was obtained from the freight departments of three railroad lines.

APPENDIX No. 5.

LETTER OF THE SAINT LOUIS AND SAINT PAUL PACKET COMPANY.

SAINT LOUIS AND SAINT PAUL PACKET COMPANY,
Saint Louis, September 30, 1886.

DEAR SIR: At request of Capt. C. W. Durham, I quote the rates that have prevailed for past four years on grain to and from points on Upper Mississippi River, viz, from—

	Per 100 pounds.
Saint Paul to Rock Island; Rock Island to Saint Paul	$0 12½
Saint Louis to Rock Island; Rock Island to Saint Louis	10
Saint Louis to Saint Paul; Saint Paul to Saint Louis	15

Yours, truly,

J. F. BAKER,
General Freight Agent.

General C. B. COMSTOCK,
President Hennepin Canal Board.

LETTER OF THE UPPER MISSISSIPPI PACKET LINE.

THE UPPER MISSISSIPPI PACKET LINE,
DIAMOND JO LINE STEAMERS,
Dubuque, Iowa, October 4, 1886.

DEAR SIR: Capt. C. W. Durham requests me to give you the rate of freight on grain from Saint Paul to Rock Island, Rock Island to Saint Louis, and from Saint Paul to Saint Louis, for the past four years.

In reply will say that there has been but very little movement of grain to and from these points for some time past. Our average rate from Saint Paul to Rock Island on this commodity would be about 10 cents per 100 pounds; from Rock Island to Saint Louis, 10 cents per 100; and from Saint Paul to Saint Louis, 12½ cents to 15 cents per 100 pounds.

Referring to our tonnage statements for some years past, I find that our average rate on all freight shipped from Rock Island to various points on the river was, for the year 1882—

	Per 100 pounds.
1882	$0 15
1883	15
1884	14
1885	15

The rate of freight to Rock Island from various points was in—

	Per 100 pounds.
1882	$0 14
1883	12½
1884	12½
1885	11

This, of course, includes all kinds of merchandise, as well as grain.

If we can be of any further service to you please advise, and we will take pleasure in furnishing you any figures that we can.

Yours, truly,

E. M. DICKEY,
Superintendent.

General C. B. COMSTOCK.

P. S.—These averages are, of course, on business largely local and in most of cases small lots. There has been but little through business to or from Rock Island for some years. Large shipments of through freights would materially reduce this average.

E. M. D.

APPENDIX No. 6.

LETTERS OF MR. O. GUTHRIE.

1.

CHICAGO, *October* 4, 1886.

In view of the fact that recent investigations in relation to the relative merits of the Illinois and Michigan Canal and the Illinois and Des Plaines rivers as routes for the proposed commercial water-way between La Salle and Lake Michigan have been unmistakably in favor of route by the rivers, it is unfortunate that our legislature, in the act approved April 28, 1882, ceding the canal to the United States, imposed such conditions upon its acceptance as to preclude the possibility of its being accepted, viz: "In case the United States shall accept this grant, it is upon the express condition that the canal shall be enlarged and be maintained as a national water-way for commercial purposes."

Nothing is clearer in my mind than that the object sought by the legislature and our people was to secure the most useful and economical commercial water-way, of which our unparalleled natural advantages were capable. This object the bill in its present form would most surely defeat. It is therefore suggested that your Board, if it should feel justified in doing so, should propose such modifications of the act as in your opinion would secure the object intended.

As to the merits and national character of the proposed improvement, it would seem to require no argument to convince, the only question being as to capacity.

Upon this point the size of the locks obviously should be the same as those upon the river below. As to the channel capacity, it is respectfully suggested for your consideration that it be made of such capacity as would at all times supply the lower river with water, independent of locks and dams; that the channel for this supply be opened as the first step in the proposed improvement; that work upon the locks and dams, now in course of construction, be suspended until the practicability of supplying the river in this manner shall have been settled, and then, if satisfactory, remove the available parts to the upper rivers.

It is confidently believed that with the erosive effect of an unceasing current, aided and directed by a few wing-dams judiciously located, and an inconsiderable amount of dredging, the banks of the lower river would soon be well defined, its level reduced, and its capacity increased.

The value of a deep, ample, and unobstructed channel to commerce and the agricultural interests along the river are so apparent as to need no argument. Its importance is manifestly so great as to justify a large expenditure in an effort to obtain it. The value of one crop of corn saved from flood in the Illinois bottoms would go far toward repaying the cost of the proposed water-supply and lower river improvement.

It must be borne in mind that the present method of improving the lower river was inspired and begun under the belief expressed in the following language by the Board of Engineers having the matter in charge, viz: "That to maintain sufficient depth at low water from Lake Michigan is impracticable at any cost." This view is so utterly at variance with the views of engineers of to-day that justification is found for the suggestions herein made.

Respectfully submitted.

O. GUTHRIE.

The BOARD OF UNITED STATES ENGINEERS ON THE HENNEPIN CANAL.

P. S.—At a conference held at Governor Oglesby's room at the Grand Pacific this morning the question of the condition imposed upon the acceptance of the canal was

discussed. The governor, Mr. Hurd, and Mr. Shorey, all lawyers, held the opinion that it would be within the discretion of the United States, in case of acceptance, to utilize so much of the canal as was deemed best, using the rivers for the remaining distance, notwithstanding the condition imposed, the real object of the grant being attained by the improvement of the rivers.

Respectfully, yours,

O. GUTHRIE.

2.

CHICAGO, *October* 18, 1886.

DEAR SIR: In relation to the advantages of water transportation, I beg leave to submit the following: For several years the Guthrie Ice Company was engaged in shipping ice from Willow Springs and Summit to Chicago by canal, an average distance of 14 miles (the company owning and operating one tug and four canal-boats), and also by railroad from Summit to the stock-yards, a distance of 9 miles (where boats could not deliver).

The railroad company at one time charged 65 cents per ton, which proved to be prohibition, when the rate was changed to 50 cents, where it has since been kept. The following, showing the actual cost by canal, together with the letters from other shippers herewith submitted, it is hoped may be of some service to your Board:

Tolls on two canal-boats and 250 tons of ice (the tug passing free of toll)	$10 00
Interest on cost of boats per day	2 00
Repairs and depreciation per day	10 00
Fuel for tug per day	6 00
Oil for tug and lights per day	1 50
Labor (five men) per day	13 00
Contingencies per day	2 50
Total	45 00

Cost per ton by railroad, 9 miles, 50 cents; cost per ton by canal, 14 miles, 18 cents.

It would seem proper in this connection to state that the boats were all light one way and the loads in every instance were moved against a current of about 1¼ miles per hour, in a contracted channel having a cross-section of only about three times the area of that presented by the loaded boat; and also in the case of the Ice Company the boat's running time was made to conform to the irregularities of the ice trade and full time of men charged to transportation, although while in port their time was utilized in handling cargo, probably to the extent of 20 per cent. of the whole time.

The railroad shipments generally were made under the most favorable circumstances, mostly by whole trains, and handled with such dispatch as to frequently load the same cars three times in two days.

Respectfully, yours,

O. GUTHRIE.

General C. B. COMSTOCK,
President Board of U. S. Engineers on the Hennepin Canal.

LETTER FROM THE BODENSCHATZ AND EARNSHAW STONE COMPANY.

CHICAGO, *October* 5, 1886.

DEAR SIR: In answer to yours of recent date as to difference in cost of freighting stone by Illinois and Michigan Canal and railroad from our quarries at Lemont, Ill., to Chicago, a distance of 25 miles, will say, freight by railroad, per cord of 13,000 pounds, is $4.50; by canal, as follows:

On 1 cord of same weight as above, tolls	$0 40
Use of boat, interest on investment, and repairs	75
Towing, per cord	80
	1 95
Difference in favor of canal, per cord	2 55
	4 50

If the canal were deepened and made wider, so as to admit of larger craft, this expense could be greatly reduced, as the cost of handling a larger boat is no greater than a small one, the boats now in use being as large as the present depth and width of canal will admit.

Yours, respectfully,

THE BODENSCHATZ AND EARNSHAW STONE COMPANY,
E. H. BROWN,
Secretary.

O. GUTHRIE, Esq.,
City.

Letter from the Excelsior Stone Company.

CHICAGO, *October* 15, 1886.

DEAR SIR: In reply to your inquiry we would say, that we estimate the cost of transporting stone *via* the Illinois and Michigan Canal from our quarries at Lemont to our docks in this city at $1.73 per cord, made up of the following items of expense, viz:

	Per cord.
Canal tolls	$0 50
Labor	76
Coal	14
Use of boat	33
Total	1 73

By railroad the same stone transported from our quarries to the team tracks of the railroad company in this city costs us $3.90 per cord.

Yours, truly,

B. J. MOORE,
Secretary.

O. GUTHRIE, Esq.,
3347 *Michigan Avenue, City.*

APPENDIX No. 7.

LETTER OF MR. J. C. DORE.

MOULTONVILLE, N. H., *September* 27, 1886.

DEAR SIR: Thanks for your letter of the 20th instant, mailed to me at Chicago, which has been forwarded to me at this place.

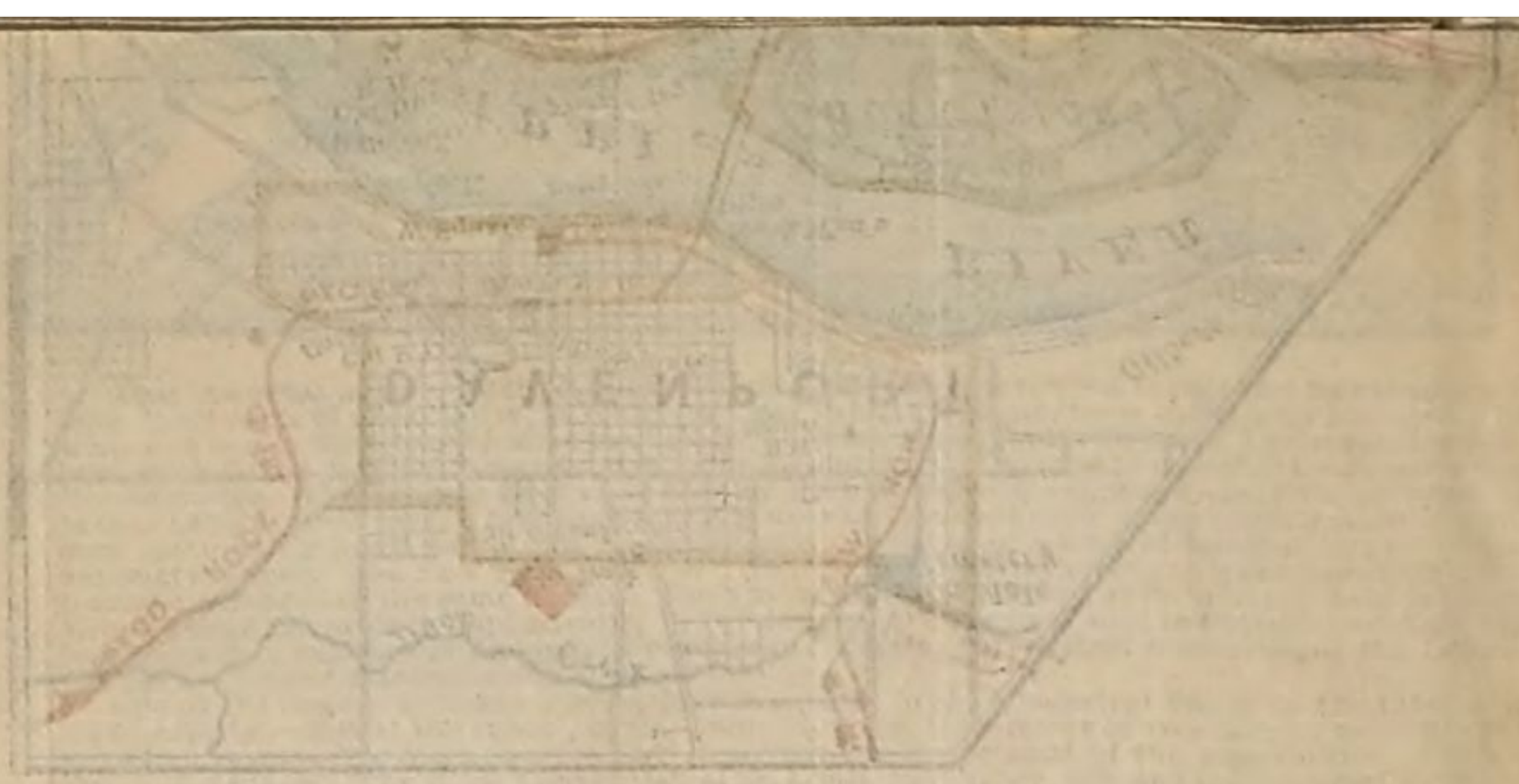
If I am correctly informed, the object of the meeting of the Board of Engineers, ordered by the last river and harbor bill, at Rock Island on the 30th instant is to determine upon the best point, advantages and disadvantages considered, for the western terminus of the Hennepin Canal.

This canal was originally projected simply for commercial purposes. But Congress seems inclined, when built, to make it subserve the interest of the arsenal at Rock Island. Therefore the opinions of General Newton, Engineer in Chief, and the Chief of the Ordnance Department, General Benét, have been sought as to the best point for the western terminus. They both, as your Board is doubtless aware, decided in favor of Rock Island. Your Board and the gentlemen named are much better judges of the best location for the western terminus of said canal, so far as the arsenal is concerned, than any civilian can be supposed to be.

For commercial purposes it will readily be conceded that the canal should strike the Mississippi River at the point where it will give the advantages of cheaper transport to the greatest extent of territory west of that river.

This canal will not lessen cost of transport from points west of the Mississippi to that river, but it will very materially lessen cost of transport from the river to Chicago. And inasmuch as it is, and will continue to be, everybody's privilege to ship from all points west of the river to the river, by so doing the advantage of the cheaper rate via this canal to Chicago will be secured.

It is quite probable that the railroads would, in great measure, carry the products of the country west of the Mississippi across that river to Chicago if the canal was built. No matter if they should, they would carry at canal rates, as the Rock Island



MEMBERS

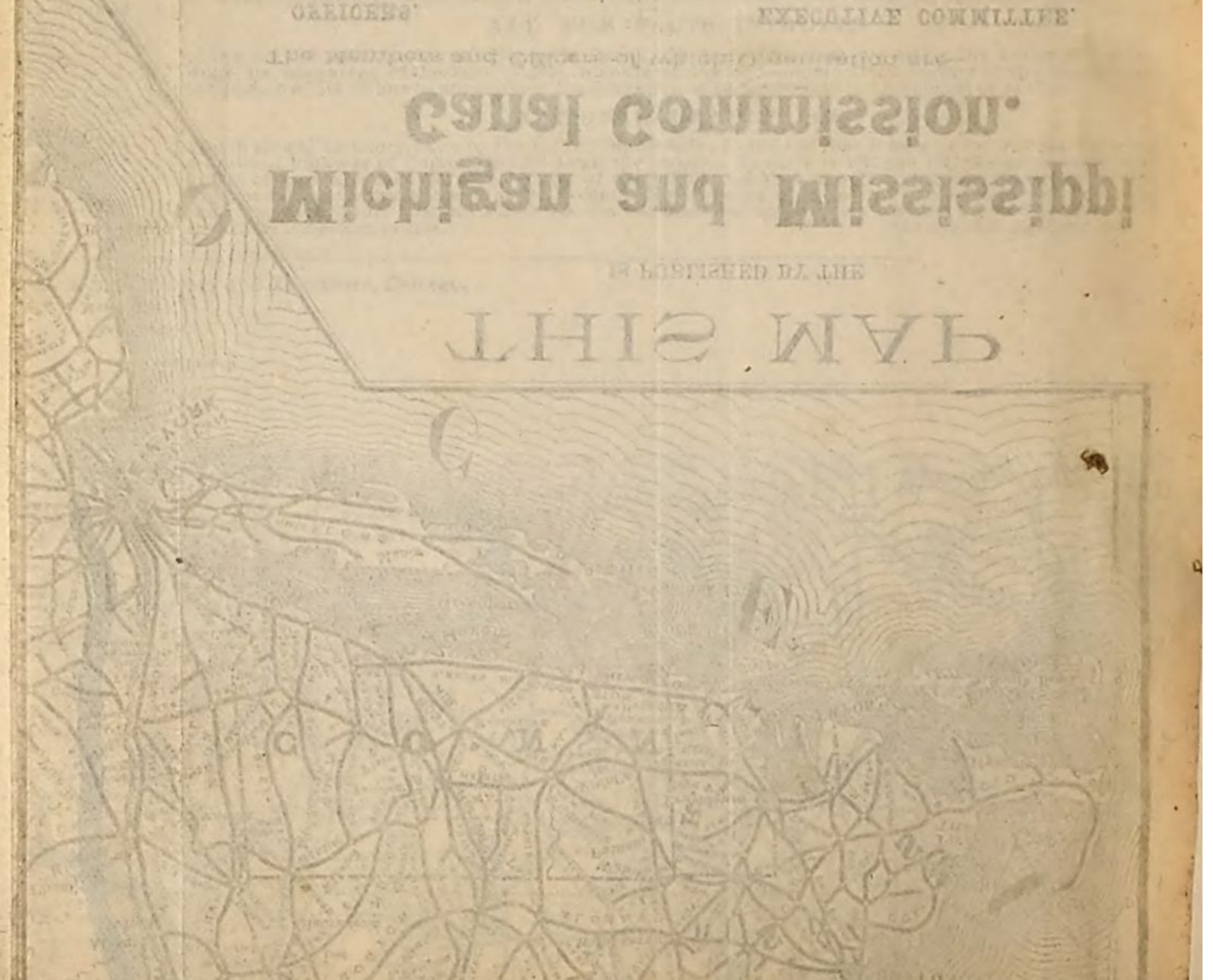
EXECUTIVE COMMITTEE

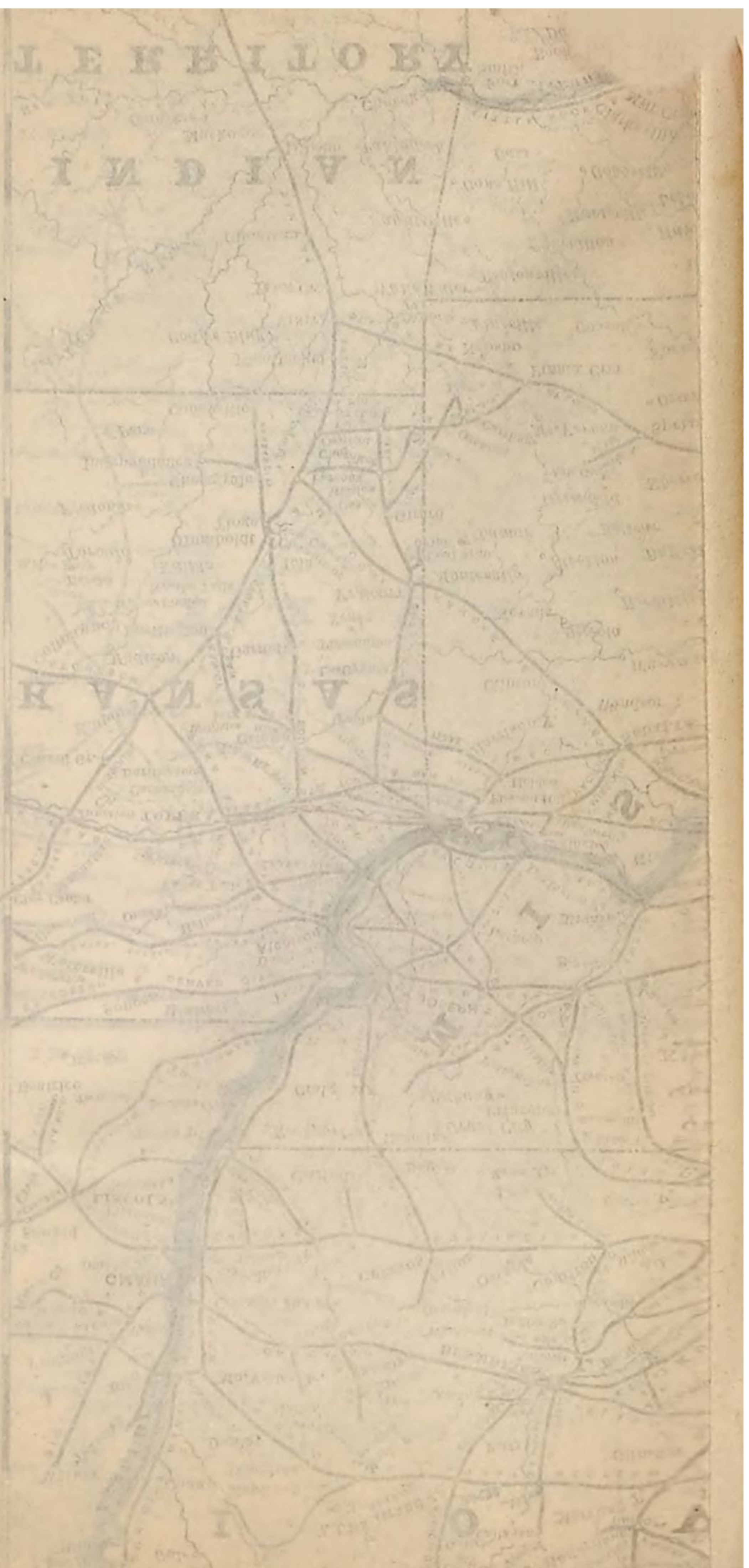
Canal Commission.

Michigan and Mississippi

IS PUBLISHED BY THE

THIS MAP




LESSER ASIA
INDIA

Railroad now does when it comes in competition with the Illinois and Michigan Canal.

Now, then, it appears to me that a careful examination of the map of the section of country to be benefited will aid materially in determining the point where the western terminus of the canal should be, in a commercial point of view.

The Illinois River improvement completed, the Illinois and Michigan Canal enlarged, and the Hennepin Canal built, it may reasonably be assumed that freight south of Quincy, going to Chicago by water, would go down the Mississippi to the Illinois River, and thence via the Illinois River to Chicago; and that freight north of Saint Paul would go to the eastern markets via Duluth and the Great Lakes.

The western terminus of the Hennepin Canal fixed at the most commanding point on the Mississippi, all that section of country between Quincy, or a point near that city, on the south, and Saint Paul on the north, and between the Mississippi (between those points) and the Rocky Mountains, a territory much larger than the empire of France or Germany, would be tributary to both the Hennepin and the Illinois and Michigan Canals.

Of course freight would come down the Mississippi to the canal a much greater distance than it would go up the river to it; therefore the further up the river the western terminus of the Hennepin is located, the further north of Quincy would be the southern boundary of the section of country to be benefited, and, consequently, the more restricted the territory to be benefited.

I have no local interest to bias my judgment, and only hope the most advantageous location for the section of country to be specially benefited may be selected, regardless of any preconceived opinion I may have entertained.

I shall not be surprised, however, to learn that in the opinion of the Board the interest of the arsenal and the interest of commerce will not differ materially in the location of the western terminus of the Hennepin.

Very respectfully,

J. C. DORE.

General C. B. COMSTOCK.

APPENDIX No. 8.

COMMUNICATION SUBMITTED BY GOVERNOR WILLIAM BROSS.

GENTLEMEN: The project of constructing a canal from the Illinois River to the Mississippi at or near Rock Island thus connecting by water-way the largest and the richest wheat-producing section of the Union with the great lakes, has been before the country for a score of years. It may be conceded that the main facts and arguments in its favor have been exhausted. Years ago Congress should have completed the canal or its friends ought to have abandoned it. But the rapid settlement of Iowa, Wisconsin, Minnesota, Dakota, and Montana, the vast increase in their cereal, animal, and other farm products, and the vigorous growth of their commercial necessities, intensify the need of its construction, and enlarge the facts and arguments in its favor. As Governor Cullom said in his great speech in the Senate, "it will not down" and the Eastern people, who seem determined not to understand its importance to themselves and to the West, may as well make the most of it.

With my cordial thanks for your kind invitation to present you such facts as might occur to me in favor of the canal, I beg, in the briefest space possible, to call your attention to the following:

Without the figures at hand to verify the assertion, it is believed that the territory in the Upper Mississippi Valley interested in this canal is larger than two-thirds, perhaps than the whole, of the Atlantic seaboard States. They produced in 1884 188,349,000 bushels of wheat and 837,574,000 bushels of corn; total, 1,025,923,000. One-half of this would be benefited in its transit to market through this canal. Major Benyaurd proved in his report (*vide* Ex. Doc. No. 117, Forty-ninth Congress) that 6 cents per bushel would be saved to the producers by the construction of this canal.

At half that saving the fabulous sum of $15,000,000 would be left in the pockets of the producers every year. But the advantage would equally accrue to the consumers on the seaboard, for it would cheapen the cost of the bread on every man's table from 8 to 12 per cent. for every day in the year. Then estimate, if you can, the value of the canal in the shipment of lumber and other bulky products eastward, and of coal, iron, hardware, and other heavy merchandise westward. It would simply be immense; and yet many eastern members of Congress sneer at Hennepin and call it a mere local project, in face of the palpable fact that by a canal of only some 70 miles and costing only $7,000,000 the two greatest water systems of the continent, and in fact, of the world, would have navigable water transit between them.

Again in 1884 Illinois paid into the National Treasury as internal revenue $23,520,000, and the other sections of the northwest $10,000,000 more, andthe amounts were increased last year. Thus the people asking for this short canal paid to the Government more than twice the whole amount appropriated for the river and harbor bill, and yet these Solons in Washington granted us but $15,000 to pay for the the final survey and location of the canal.

Was ever absurdity more absurd or injustice more infamously unjust? One-third of the revenue Illinois pays the Government in a single year would construct the canal; and yet these wise and fair men in Congress grab the whole of it and spend it mostly in useless works elsewhere, bating the most niggardly pittance, scarcely arising above a direct insult. To give such acts a name would doubtless provoke mortal offense.

Take a few other facts. Coal is carried from Erie to Chicago, nearly 1,000 miles, for 64 cents per ton; thence to the Mississippi River by rail, 200 miles, the freight is $2, and for the next 100 miles it mounts up to $4. By the improvement of the Saint Clair Flats and the Erie Canal the freight on a bushel of wheat between Chicago and New York has been reduced from 17 and 20 cents to an average of 6 cents. In winter it is 12 to 21 cents by rail. The freight on a bushel of wheat in 1884, between Northern Iowa and Chicago, was 10.8 to 16.8.

That wheat could be shipped to Liverpool for about the same price, showing at least 4,000 miles in favor of water transit. It is stated that it costs less to ship cotton from India to Liverpool—of course by the Suez Canal—than to send it thence to Manchester, 200 miles.

Manufactured goods sent 200 miles to Liverpool paid 12*s.* 6*d.*, and for the 4,000 miles thence to Bombay, 10*s.*

All the leading nations of Europe, though covered by a net-work of railways, are spending vast sums for canals and to improve their water-ways. At a congress on inland navigation, recently held at Brussels, the minister of public works said—

"That canals had been too long neglected, and that public attention was now being turned to them, not with that impetuosity which fifty years ago created an immense iron net-work, but with a wise maturity which augured well for the future."

In a paper on the eventual prospect of the canal, M. Van Duzen, one of the secretaries of the congress, argued that the true transport arrangements of the country should include both railways and canals, each taking its share of the traffic according to its aptitude, to the great advantage of trade and manufacturers.

The canal would not take from the railway either passengers or goods sent in small quantities, while the water transports would comprise substances forwarded in large quantities at low tariffs on which the profit is insignificant.

The canal would thus free the railway from a clog upon its action, and enable it the better to organize its fast passenger service to its own profit and the public advantage.

Reduction in the cost of transport is the remedy suggested for the present stagnation in trade, it being indispensable that the transport of raw materials be cheapened, both for industry and agriculture.

Mr. Adamson observed "that water carriage was the carriage of the future for heavy and not necessarily fast traffic, and the legitimate province of the railways, with their handmaids, the telegraph and the telephone, was for quick speed and light weight."

"M. de Saint Hubert, of Nemours, gave an outline of his scheme for connecting all the large rivers of Central Europe, the Elbe, the Rhine, the Danube, the Oder, and the Weser, thus forming one vast system of waterways, connecting the North, Black, and Baltic seas, and making Berlin and Vienna seaports. There would be a length of 621 miles to cut, at an estimated cost of £11,000,000, requiring a capital of £14,025,000; but he estimates the traffic at 2,400,000 tons, at 0.62 per mile. Taking one-half of this to begin with, there would be an immediate revenue of £600,000, yielding more than 5 per cent. on the capital."

How much better it would be for the nations of Europe to carry out this vast scheme than to exhaust their resources in useless wars and murdering their people by tens, if not by hundreds, of thousands.

But to return to the matter immediately before you, it is here stated that memorials have been sent to Congress in its favor by the Boards of Trade of Chicago, Saint Paul, Minneapolis, La Crosse, Duluth, Davenport, Rock Island, Buffalo, Syracuse, and New York. The National Board of Trade in Washington, and the Industrial Congress, at its meeting in Chicago in 1884, strongly urged the construction of the canal.

The legislature of Iowa has indorsed the measure five times. The legislature of Illinois and the State senate of New York have also urged its construction. The Produce Exchange of New York, having some 3,000 members, the largest and probably the most conservative body of commercial men in the country, have indorsed strongly. They say that—

"Whereas the completion of a waterway from the Mississippi River to Lake Michi-,

gan by the construction of the Hennepin Canal promises to realize advantages of national importance; and

"Whereas there are insuperable obstacles in the way of having such improvement carried out by private enterprise; and

"Whereas the building of the Hennepin Canal may justly be regarded as part of the improvement of the Mississippi River: Therefore,

"*Resolved*, That in the opinion of the New York Produce Exchange the United States Government should undertake to build the Hennepin Canal and to maintain the same free for all time to come, and further.

"*Resolved*, That our Senators and Representatives be requested to join the Representatives of other States in providing the necessary legislation for carrying out this plan."

I submit, gentlemen, that the work you have in hand is eminently national in its character; and it is a prime necessity to the foreign and the internal commerce of the country.

Hon. Ralph Plumb, of Illinois, in a convincing speech in the House of Representatives, July 27, says:

"In conclusion, the substance of the facts set forth in the report on the Hennepin Canal, and of the arguments which follow with irresistible logic therefrom, may be briefly summed up as follows:

"(1) Our aggregate cereal exports in 1880 amounted to $288,000,000.

"(2) Since 1880 we have lost more than 40 per cent. of our cereal exports by reason of competition in the great foreign markets.

"(3) Foreign markets are indispensable for our surplus products.

"(4) Nothing but the cheapest transport possible can enable us to compete with Russia, Australia, and India in those markets.

"(5) The value of every acre of wheat and corn producing land in the Mississippi Valley depends upon the cheapest possible transit to the seaboard.

"(6) The cheapest transit possible is admitted to be by water.

"(7) The Hennepin Canal is the missing link to furnish complete water navigation from Saint Paul to New York, a distance of 2,000 miles, utilizing about 600 miles of the Mississippi River in its course.

"(8) By building this canal we can regain and retain the great foreign markets for our cereals and increase the magnitude of our exports.

"(9) By this extension of our water-ways to the West the products of that region will reach the consumers of the East at reduced cost to the latter and increased profits to the former.

"(10) No public improvement proposed in this country has been so generally and strongly commended and urged by legislatures, internal improvement conventions, boards of trade and other commercial bodies, and eminent public men."

Let no man deceive himself with the idea that the 10,000,000 of people of the Northwest who furnish the largest part of the cereal and animal products for home consumption and foreign export, and who pay into the National Treasury every year more than twice as much money as Congress appropriated for river and harbor improvements, will tamely submit to be snubbed and denied enough of their own money to connect the two great water systems of the continent. No! gentlemen Congressmen, that game has been played out.

The people of the Northwest will see to it, certainly after the census of 1890, that their Representatives shall be as sternly faithful as their Senators, and then their rights will be respected and their reasonable wishes granted.

All of which is most respectfully submitted to the kind and, it is hoped, to the candid and favorable consideration of the Honorable Board of Engineers.

Submitted by governor

WILLIAM BROSS.

The Honorable BOARD OF ENGINEERS
Having in Charge the Survey and Location of the Mississippi and Michigan Canal.

APPENDIX No. 9.

COMMUNICATION FROM THE ENTERPRISE CLUB.

THE ENTERPRISE CLUB,
Comanche, Iowa, October 23, 1886.

GENTLEMEN: We herewith hand you all the statistics that we have been able to procure. Believing the Hennepin Canal to be for the especial interest of the Northwestern States, we find (see Exhibit No. 1) that they contain nearly *one-seventh* of the

population., *one-fifth* of the value of farms, and produce *one-fifth* of the farm products of the entire United States;

Also of the counties bordering on the Mississippi River, those north of the proposed Marais d'Osier terminus, to contain nearly three times the population, two and one-third times the value of farm land, and produce nearly three times the value of farm products of those below said terminus. (See Exhibit 1.) Finding the per cent. to be as above, we believe that the terminus should be at the Marais d'Osier and thereby prevent the transportation of this large percentage over the expensive and dangerous *rapids* to the proposed Rock Island terminus. By Exhibit No. 2, from report 1885, we find the said States to produce 1,154,324,000 bushels of corn, wheat, and oats against 2,922,697,000 of the same grains in the entire United States (?), or a considerable over one-third of the entire amount, and at present there is no way of handling this vast product but by the expensive railway systems, which, from the reports of the railroad commissioners of Iowa, Minnesota, and Illinois we find to average $1.50 per ton per 100 miles. Consequently, according to Exhibit 3, taken from the reports of the Board of Trade of Chicago and Milwaukee for 1885, the number of tons of flour, wheat, corn, oats, rye, and barley received from the western railways *only* to be 4,464,568 tons. This being eastbound grain only, we would have to add all other east as well as westbound freight, which would give us over 5,000,000 tons transported from the Northern Mississippi River to Chicago and Milwaukee at an expense of $2.10 per ton, or $10,500,000, which ought to be carried by canal for 50 cents a ton (estimated by rates charged from Chicago to New York by all-water routes as per report of Board of Trade of Chicago, 1885), or $2,500,000, being a saving of $8,000,000 annually. This estimate we consider to be very low, as per Exhibit No. 4 (taken from report of railroad commissioners), we find the railroads carried in Iowa alone 12,391,025 tons and in Minnesota 8,424,669 tons, or nearly 21,000,000 tons.

Allow us to call your attention to the difference of 20 per cent. in *all-rail* rates between Chicago and New York during the months of water navigation, as showed on page 165, report of Board of Trade Chicago (which we mail you this day), we also call your attention to the difference between all-water rates on grain of $7\frac{3}{8}$ cents per 100, while all rail, *summer*, is 20 cents per 100. (Pages 164 and 166 same report.)

Notice on page 19 of same report the receipts at Dulnth of grain and flour to be 1,022,000 tons, which we notice goes by water to European ports, which should go by way of Saint Paul and Chicago to New York, but on account of the high railway rates between Saint Paul and Chicago this Government and its citizens lose all benefits from such shipments.

Mr. President, we would like to call your attention to the letters from the secretary of the board of trade of Chicago and E. M. Dicky, Esq., superintendent of the Diamond Jo Line of steamboats, herewith accompanying. We wish you to *especially* note Mr. Dicky's letter, in which he states that the terminus should be located *above the rapids*. This, coming from the superintendent of the largest line of boats on the Mississippi River, we wish you to considerer of the utmost importance, bearing upon the terminus of the canal at the Marais d'Osier.

We regret, Mr. President, that we are unable to send you more extensive and satisfactory evidence as to the tonnage, and all rail and water rates, but we assure you that we have done the best we could, owing to the shortness of time and hesitation on the part of railway and steamboat official, to make statements of tonnage and rates.

Please consider our efforts, however inefficient, to have been earnestly made in the hopes of aiding you in the solution of this problem. However much we may desire the terminus to be located at the Marais d'Osier, we will gracefully acquiesce in the choice of any route which may be selected.

Trusting that you will report to our next Congress in favor of the Hennepin Canal we remain, gentlemen,

Your obedient servants,

W. R. ANTHONY, *President.*
C. C. JUDD, *Secretary.*
P. J. FINNEY,
U. S. HART,
J. B. CHAMBERLIN,
Committee.

To the Honorable BOARD OF COMMISSIONERS ON THE HENNEPIN CANAL,
General C. B. Comstock, President.

LETTER OF THE SUPERINTENDENT OF THE DIAMOND JO LINE OF STEAMBOATS.

DIAMOND JO LINE STEAMERS,
SUPERINTENDENT'S OFFICE,
Dubuque, Iowa, October 9, 1886.

MESSRS.: Replying to your favor 8th instant, would say that we cannot furnish you the statistics asked for. We are interested in the Hennepin Canal movement of course, and have done and will do all in our power to further its success. Have made statement of our tonnage each year for Major Mackenzie, and he has incorporated it with the statements of other steamboat lines and given the gross tonnage in his reports. We do not wish to make statements of our tonnage separately, and you will find the figures reported by Major Mackenzie about correct. While we are interested in the canal, and think it would be a good thing for the whole Northwest, no matter where the terminus might be located, we are particularly desirous of having it located above the rapids, and think there should be some action taken by all interested in this northern route to urge its claims and show its many advantages. Unless some such action is taken I fear the terminus will be fixed at Rock Island, simply because of the assumption of the Rock Island and Davenport people that it *must* come there. If the location is left to the Engineer Corps, as it should be, there is no question of the result; but I fear, unless something is done to bring forward the claims of the upper route, that the lobby will succeed in having Congress fix Rock Island as the terminus. If I can do anything to forward this movement command me.

Yours, truly,

E. M. DICKEY,
Superintendent.

W. R. ANTHONY & CO.,
Comanche, Iowa.

EXHIBIT NO. 1.

United States farm census, 1880, *to show relative importance of territory, &c., mentioned.*

States.	Population.	Value farms.	Value farm products.
Minnesota	780, 773	$193, 724, 260	$49, 468, 951
Wisconsin	1, 315, 497	357, 709, 507	72, 779, 496
Iowa	1, 624, 615	567, 430, 227	136, 103, 473
Illinois, one-half	1, 538, 935	504, 797, 290	101, 990, 068
	5, 259, 820	1, 623, 661, 274	360, 341, 988
Kansas	996, 096	235, 178, 936	52, 240, 361
Nebraska	452, 402	105, 932, 541	31, 708, 914
Dakota	135, 177	22, 401, 084	5, 648, 814
	6, 843, 495	1, 987, 173, 835	449, 940, 077
United States	50, 155, 783	10, 197, 096, 776	2, 213, 402, 564

[To show relative standing of river counties above and below Meredosia.]

Minnesota (eight river counties)	241, 243	51, 569, 548	12, 871, 928
Wisconsin (eight river counties)	160, 494	38, 180, 051	9, 957, 023
Iowa (five north river counties)	152, 150	51, 390, 465	10, 885, 094
Illinois (three north river counties)	75, 389	34, 624, 845	6, 233, 766
	629, 273	175, 764, 909	39, 947, 811
Iowa (five south river counties)	145, 536	48, 435, 729	9, 563, 528
Illinois (three river counties)	68, 526	27, 923, 375	5, 003, 880
	214, 062	76, 339, 104	14, 567, 408

EXHIBIT No. 2.—*Crops of* 1885.

States.	Acres of wheat.	Wheat.		Corn.		Oats.	
		Bushels.	Value.	Bushels.	Value.	Bushels.	Value.
Wisconsin	1,362,785	15,665,000	$11,905,400	32,750,000	$11,135,000	47,778,000	$12,422,280
Minnesota....	3,084,274	34,285,000	23,999,500	18,431,000	5,897,920	37,544,000	9,386,000
Iowa.....	2,683,944	30,332,000	20,322,440	242,496,000	58,199,040	74,718,000	16,437,960
Kansas.....	1,060,250	11,197,000	7,278,050	158,390,000	38,013,600	27,145,000	6,243,350
Nebraska	1,755,252	19,828,000	11,301,960	129,426,000	24,590,940	24,028,000	4,565,320
Dakota.....	2,187,084	27,913,000	17,585,190	15,345,000	4,296,600	13,229,000	3,042,670
Illinois, one-half.....	627,952	5,341,000	4,326,615	134,499,000	37,659,720	53,984,000	12,956,160
Total.....	12,961,541	144,561,000	96,719,155	731,337,000	179,792,820	278,426,000	65,053,740
United States, 1885.....	.....	357,112,000	275,320,390	1,936,176,000	635,625,000	629,409,000	179,631,860

EXHIBIT No. 3.—*All rail through business; flour and grain received at Chicago during* 1885 *by western railways.*

	Flour.	Wheat.	Corn.	Oats.	Rye.	Barley.	Total number.
	Barrels.	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Cars.*
Chicago and Northwestern	1,414,814	2,867,924	4,914,992	5,685,057	120,507	2,552,684	36,348
Chicago, Milwaukee and Saint Paul Railroad	1,783,120	1,053,700	1,324,800	274,000	153,000	1,231,000	20,745
Illinois Central Railroad	108,956	162,726	1,390,515	3,369,944	60,960	153,210	8,140
Chicago, Burlington and Quincy Railroad	101,745	746,651	12,890,150	7,033,689	294,476	328,740	33,755
Chicago, Rock Island and Pacific	557,406	199,677	2,784,896	3,596,662	79,552	75,165	14,490
Chicago and Alton	66,970	89,189	1,184,596	1,213,439	9,974	.....	4,063
Illinois and Michigan Canal	91,771	15,100	2,049,545	575,745	16,300	.....	.....
Totals	4,124,782	5,134,967	26,539,494	21,748,536	734,769	4,340,799	117,541
Totals in tons	412,478	153,549	743,105	347,976	20,573	104,179	.....
Receipts by lake	32,765	38,550	.....	300	.....	30,500	.....
Total receipts by railroads and lake, less Milwaukee through shipments	5,385,772	18,909,717	62,930,897	37,678,753	1,892,760	10,760,127	.....
Shipments:							
By lake	652,373	5,436,461	29,382,591	1,571,481	436,199	80,761	.....
By rail	4,587,826	8,538,571	29,422,976	30,854,981	780,762	.....	.....
Totals	5,240,199	13,975,032	58,805,567	32,426,462	1,216,961	5,683,003	.....
							Total equal to bushels.
Received at—							
Chicago	5,385,772	18,909,717	62,930,897	37,678,753	1,892,760	10,761,127	156,408,228
Milwaukee	2,232,540	9,814,903	637,065	1,666,948	279,267	5,101,520	27,546,133
Duluth	1,019,999	14,869,675	93,287	91,269	.....	38,681	19,682,908
Minneapolis	21,468	32,900,560	389,400	781,600	.....	298,394	34,466,560
Totals	8,659,779	76,494,855	64,050,649	40,218,570	2,172,027	16,199,722	238,103,829
Saint Louis, Chicago, Milwaukee, Peoria, Duluth, Minneapolis, Detroit, and Toledo	10,305,669	107,108,607	113,952,466	65,810,036	3,634,762	21,078,322	357,959,705

EXHIBIT No. 4.—*Tonnage of Iowa and Minnesota for the year ending June* 30, 1885.

	Iowa.	Iowa.	Minnesota.
	Tons.	*Per cent.*	*Tons.*
Grain	3,123,278	25.20	2,449,973
Flour	499,928	4.03	1,251,708
Provisions	201,923	1.63	62,350
Animals	1,001,077	8.63	218,875
Other agricultural products	291,651	2.25	151,463
Lumber and forest products	1,329,351	10.63	1,600,655
Coal	3,239,012	26.03	722,607
Lime, cement, &c	145,334	1.15	84,727
Salt	161,914	1.30	42,967
Petroleum and oil	52,359	0.42	17,312
Iron, steel, and castings	305,131	2.46	180,172
Stone and brick	247,910	2.00	213,337
Manufactures	267,222	2.06	369,211
Merchandise and other articles not enumerated	1,524,935	12.21	1,059,312
Total	12,391,025	100.00	8,424,669
Total number of tons carried entire line	36,085,081	.....	23,953,918
Value of Iowa tonnage transported	$841,839,271	.....	.....

Letter of Mr. B. B. Hart.

CLINTON, IOWA, *October* 1, 1886.

GENTLEMEN: Your call for a convention in the interest of a canal connecting the lakes with the Mississippi River, in furtherance of all the objects for which you were commissioned by the last session of Congress, did not meet my notice and the notice of others whose interest in its western termination was diverse to that of those residing at Rock Island, Davenport, and Moline. Had the call been more fully understood some other features of this enterprise would have been presented to your attention. I am aware, in presenting your report to Congress, due consideration will be accorded to Major Benyaurd's report, having made himself thoroughly conversant with the topographical features of the three routes surveyed.

A number of years' experience, thirty years ago, in the construction and operation of the canals of New York State, and an intimate knowledge of the topography, from railroad surveys, of that portion of Illinois to be traversed by the Hennepin Canal, if built, convinced me of the decided superiority of the "Marais d'Osier route" over either of the others proposed. My recommendations to our State Senators of this route was the means of having this route surveyed. Major Benyaurd's survey and report show the route to be eminently practicable, partisans and non-experts nevertheless to the contrary. From the reports in a Davenport paper, some party objected to the Marais d'Osier route on account of the flow of water from either river (Rock and Mississippi) during a flood. By reference to Major Benyaurd's report, at a point about midway between rivers he located a lock of 16 feet lift, which is the divide between the rivers. There is a large amount of waste earth, and it can be utilized for a bank and road for produce to reach the canal. Then a bank 3 or 4 feet average height, not more than one-quarter of a mile in length, will provide a roadway, and prevent the flow of water either way from one river to the other in time of flood. This precaution is not mentioned in Major Benyaurd's report, and was evidently used before you to prejudice the northern route.

The Hennepin Canal has always been represented as exclusively necessary for the interest of the Northwest, which would furnish nineteen-twentieth of the business. Major Benyaurd's report shows this great excess of business, on the Rock Island route, must be subjected to an increased length of 40 miles to reach Chicago from the Northwest, 30 miles by river and 10½ miles more of canal, and 4 more lockages than by the northern route, and that too over the most dangerous navigation of the Mississippi River, the Rock Island Rapids. This increased length would consume from 9 to 12 hours of time more than by the Marais d'Osier line.

Commercially, so far as Rock Island and Davenport are concerned, that locality would be as well subserved by the northern route as by their own, the Rock Island route. The 10½ or 13 miles (whichever route surveyed is adopted), and the 4 extra lockages, would be a fair offset for the 30 miles extra distance to Chicago to reach the Marais d'Osier route by the Mississippi River, and would be quite as *expeditious* and cheap as the Rock Island route with its 10½ miles extra length of canal and 4 more lockages. Why should Rock Island ask to have nineteen-twentieths of the freight destined for this canal subjected to the delays and expenditures incident to

12 hours more time in transitu when her own legitimate business would be just as expeditiously received and forwarded by the Marais d'Osier line as by the Rock Island line? What is true for Rock Island is true for all points below there on the Mississippi River.

The improvements for the Illinois River are so far advanced that they should be completed before the Hennepin Canal can be constructed. This done, all business below the Des Moines Rapids seeking Chicago would take the Illinois River rather than come to Rock Island, lock up 100 feet, then lock down again 204 to the Illinois River, which point could be reached more expeditiously with only 28 feet of lockages.

Our Rock Island friends always keep the use of the Illinois River as a water-way out of account for southern traffic, when advocating the Rock Island route of the Hennepin Canal.

One point should be adhered to, in the construction of the Hennepin Canal—the Government and its engineers must locate for the general interest. A wrong location which subjects nineteen-twentieths of its business to greatly increased expenditures and time is a mistake that will never be covered up. Time will only make the mistake more palpable.

The necessary termination on the Rock Island route of the canal for 15 or 18 miles through the Green and Rock rivers, as surveyed for cheapness in times of flood and high water, is very objectionable and must necessarily often delay navigation unless far stronger motive powers are used than intended.

Very truly, yours,

B. B. HART.

Messrs. General COMSTOCK, Colonel POE, and Captain POST.

APPENDIX No. 10.

LETTER FROM HON. R. J. OGLESBY, GOVERNOR OF ILLINOIS.

STATE OF ILLINOIS, EXECUTIVE OFFICE,
Springfield, October 18, 1886.

DEAR SIR: Upon the receipt of your letter of the 28th of September last, it was referred to the Board of Canal Commissioners of the State of Illinois, with directions to furnish, in authentic shape, the information desired in said communication.

Your communication of the 5th instant, in which you state "I would ask to be informed what rights or privileges have been granted to Chicago by the State of Illinois in this matter, or have been acquired without grant; and to be furnished with copies of any such grant, authority, or other action by the State, or by any of its officers," was, in like manner, referred to the Board of Canal Commissioners.

I have the honor to inclose herewith a "statement showing leases of water-power, 90-foot strip, lots and lands and ice on the Illinois and Michigan Canal; also contracts for clay, spoilbank, and other stone," transmitted by our canal commissioners, which I trust will enable your board to arrive at a correct and exact understanding of the matters covered by said statement in so far as the same is responsive to the four points mentioned in your first communication.

I also inclose you a printed list* of locks and lands still belonging to the canal referred to in the communication of the canal commissioners to me of date October 7, 1886; and also please find a copy of a communication from George F. Brown, secretary of the Board of Canal Commissioners, addressed to me of date October 7, 1886.

In response to the inquiries contained in your communication of the 5th instant, I inclose you herewith a typewriter copy of an act of the General Assembly of the State of Illinois, approved February 16, 1865, which conferred upon the city of Chicago the power to enter upon the Summit Division of the Illinois and Michigan Canal, and to complete the same according to the original deep-cut plan, with modifications, &c., as stated in said act; and an act of the General Assembly of the State of Illinois, approved October 20, 1871, entitled "An act to relieve the lien of the city of Chicago upon the Illinois and Michigan Canal and revenues," &c., by which last-mentioned act you will observe the State of Illinois made provision for refunding to the city of Chicago $2,955,340, to relieve the State of the lien created upon said canal for any amount expended by the city of Chicago in the improvement of the same.

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* Omitted here. It may be found printed in Report of Board of Engineers as Table No. 15.

The original copy of an act approved 16th of February, 1885, will be found on pages 83 and 84 of the session laws of 1865; and the original act approved October 20, 1871, will be found on pages 170, 171, and 172, of the session laws of 1871 and 1872, of the State of Illinois.

To the total sum expended by canal commissioners and canal trustees, $6,557,681.50, the cost of constructing the Illinois and Michigan Canal, may be added the sum of $2,955,340. The amount paid by the State to the city of Chicago, as provided in the act of October 20, 1871, being the amount expended by the State of Illinois in the construction and completion of said canal.

Very respectfully, yours,

R. J. OGLESBY.

General C. B. COMSTOCK,
President Board of Canal Engineers.

LETTER FROM THE BOARD OF CANAL COMMISSIONERS OF ILLINOIS.

STATE OF ILLINOIS,
BOARD OF CANAL COMMISSIONERS,
General Office, Lockport, Ill., October 7, 1865.

SIR: The letter of your private secretary of 2d instant, inclosing one from Col. C. B. Comstock, one of the Board of Engineers appointed by Congress to examine the canal, is duly received.

In reply thereto we would submit the following:

(1) The cost of constructing the Illinois and Michigan Canal was—

Amount expended by the canal commissioners	$5,133,062 21
Amount expended by the canal trustees	1,424,619 29
Total	6,557,681 50

This does not include the amount expended by the city of Chicago in deepening the Summit Level of the canal, and refunded to said city after the fire in 1871 by act of the legislature of this State, approved October 20, 1871.

(2) There was granted to the State of Illinois by act of Congress approved March 2, 1827, the alternate sections of land for 5 miles on either side of said canal. The odd-numbered sections were selected under this grant, and through those sections the bed of the canal and 90 feet on either side have always been reserved from sale.

In Lockport and Ottawa the canal is of double width (120 feet), and the canal officials laid out and sold lots right up to the bank on one side of the canal; on the other in Lockport a street is laid outside of the tow-path, and in Ottawa the "ninety feet' is reserved.

A list of the lots and land still belonging to the canal may be found in the appendix to the last report of the canal commissioners, pages 27 and 28, which is herewith inclosed.

(3) Through the even-numbered sections right of way was granted, and 90 feet on either side, by act of Congress of March 30, 1822. In some instances land through which the canal passes was patented before this grant, and through such sections no "90-feet strip" is claimed.

(4) A list is herewith inclosed, showing the leases of water-power, "90-feet strip," lots and lands and ice, also the contracts for clay and stone now existing.

Respectfully submitted.

GEO. F. BROWN,
Secretary Commisssoners.

Hon. R. J. OGLESBY,
Governor, Springfield, Ill.

APPENDIX No. 11.

COMMUNICATION OF CITIZENS, COMMITTEE OF ROCK ISLAND, MOLINE, AND DAVENPORT.

ROCK ISLAND, ILL., *September* 30, 1886.

SIR: In response to your courteous invitations, to them respectively forwarded by you several days ago, a number of the citizens of Rock Island and Moline, Ill., and Davenport, Iowa, now unite in submitting for consideration some facts and arguments relating to the proposed connection of the Mississippi River with the lakes by means of a navigable canal.

I.

It is important to notice that the construction of that canal has for many years been earnestly desired by a large aggregate of the people of the Northwest.

Through mass meetings, delegate conventions, resolutions of commercial bodies, continuous publications in the local journals and in the columns of newspapers published miles away, has this desire found reiterated expression.

It has, also, been earnestly voiced in legislative halls.

The general assembly of Iowa six times, beginning in 1864, and closing at its last session, unanimously memorialized Congress for the establishment of that canal by the General Government.

The legislature of Illinois and that of New York have also been earnest in similar appeals to our national law-makers.

The most largely attended delegate conventions ever held in the Mississippi Valley for any purpose—that of Davenport, Saint Louis, and Saint Paul- have explicitly urged the construction of the canal as a national and free highway of commerce. So, also, have conventions held at Washington and at Chicago. In fact, it is not at all exaggerating to affirm that the records of the entire Union may be vainly searched for evidence that any other work of internal improvement, proposed only, entered upon or actually completed, has ever had its construction urged and pleaded for by the popular voice with anything like the unanimity and earnestness which has found such continuous expression in behalf of the Hennepin Canal. Why this constantly sustained demand if it be not the result of an impelling consciousness of real and pressing need?

II.

Abundant reason for this concert and appeal is apparent.

It is found in the fact that the Upper Mississippi Valley is shut out from participation in the cheap freightage to and from the Eastern Atlantic seaboard, which enriches the lake regions, yet is so excluded only by a barrier so comparatively easy of removal that its continuance is rendered particularly objectionable and aggravating. Half a century ago it was seen that nature had, by its location of the Des Plaines and Fox rivers, clearly invited human enterprise to connect the waters of Lake Michigan with those of the Illinois River. Just as plainly does nature to-day invite human enterprise and skill to secure a practical commingling of the Illinois and the Upper Mississippi by its location of the valleys of Bureau Creek, Green River, and Rock River.

Why should not these provisions of nature be so utilized as to extend to the Upper Mississippi Valley the benign reign of cheap freightage now ending, for all practicable purposes, at Chicago? Between Chicago and the East, the lakes, the Erie Canal, and the Hudson securely determine freight rates in the interest of producer and consumer. At Chicago that potent control has instant termination for western-bound commerce. East of Chicago, cheap freights. West of Chicago, high rates of freight. At Chicago, east-bound commerce emerges glad and free from the grasp which absence of water-route competition fosters at that point upon all transportation from the West and to the West. These are the conditions which compel and intensify the demand of intelligent public opinion for the construction of the Hennepin Canal.

III.

The popular judgment and desire thus called into exercise has further and special incitement in the fact that the trend of Upper Mississippi commerce is inevitably and increasingly eastward. On the eastern Atlantic seaboard are not alone the great entrepots of American foreign commerce, but the industrial centers and the teeming populations which constantly invite and even compel multitudinous exchanges of commodities with the Northwest.

To simply state this central fact is to give all necessary or possible enforcement to the demand for extended and improved routes of transportation between the Upper Mississippi Valley and the East.

IV.

Congress annually authorizes the expenditure of vast sums of money for the improvement of the water routes connecting the North with the South. The people of the Northwest neither criticise nor censure such liberality. But they fail utterly to appreciate the justice of denying even a modicum of such liberality to the facilitating of connections between the West and the East. Instead, they insist that to object to the expenditure of public money for the purpose of removing obstructions which but narrowly separate great systems of water-route transportation, else united in access

to the eastern seaboard, while, at the same time, spending millions in removing obstructions in route to the southern seaboard is to simply anew illustrate the fatuity with which even confessed and august wisdom can strain at a gnat and swallow a camel.

V.

The advantages certain to result to the entire country from the opening up of the desired water-route connection between the Mississippi and the lake system have been so repetitiously and exhaustively set forth in public and official papers that it can scarcely be necessary to even recall to your attention the more noteworthy of these exhibits. Not to leave this line of important and potential facts untouched, however, permit us to invite your considerate and particular examination to such official records as the following, treating of this subject, and directly discussing the facts of commercial, industrial, and financial relation to the Hennepin project:

(*a*) The report on "Transportation Routes to the Seaboard," made to Congress in 1875, by the committee of the United States Senate, of which Senator Windom was chairman.

(*b*) The report of Maj. W. H. H. Benyaurd, United States Army, communicated to the Forty-eighth Congress by the Secretary of War. In this, as directed by resolution of the Forty-seventh Congress, special attention was given to the benefits to commerce promised in the completion of the Hennepin Canal. A comprehensive review of the manufacturing and transportation concerns of Rock Island, Moline, and Davenport is embraced in that report, a copy of which is herewith presented.

(*c*) The report of the Special Committee of the Senate on Interstate Commerce, made to Congress at its last session by Senator Cullom. In that the argument for the construction of the Hennepin Canal is at length presented.

We may also be permitted to refer to the several speeches delivered in both Senate and House by well-known legislators, from the East as well as from the West, who have advocated the construction of the Hennepin Canal. Also, to the records of the conventions held at Davenport, Saint Louis, Saint Paul, and Washington. A copy of the report of the Davenport convention is herewith submitted.

VI.

As to the precise route upon which the canal should be located, permit us to emphasise to your attention a single incontrovertible fact, not disputed anywhere, so far as we know or have reason to believe. This is that from the very inception of the effort in behalf of the Hennepin Canal to the present hour, during more than twenty years, not a single friend and advocate of that canal has ever proposed any other point as its western terminus than one at or near Rock Island. Not one of such friends and advocates have ever thought of a western terminus above Watertown.

Aside from a strictly engineering point of view, from which officers of the Engineer Corps have felt that they were under obligation *professionally to exclude all commercial and economic considerations*, the Meredosia route has had advocacy solely from those who are really opposed to the canal *in toto*. These are the cold facts of the situation. It is not denied that the Meredosia route presents possibilities of somewhat longer levels and less lockage for the canal than does either of the other routes proposed. But it is submitted that the canal was never advocated, nor is it now desired simply or mainly, as an illustration of the possibilities of engineering skill in connecting two great water-courses. Rather and solely the Hennepin Canal has been desired, and still has advocacy, in the necessities and demands of the commerce of the Northwest and of the country at large. Therefore the canal should be located on a line parallel to and contiguous to the already well-established lines of commercial travel and transportation. It must have its termini at points at which are already established the agencies for conducting the business it is expected to subserve. As well locate the eastern terminus of the canal at the extreme southern end of Lake Michigan, instead of at Chicago, as to place the western terminus at an uninhabited and desolate point on the bank of the Mississippi, instead of at Rock Island or Moline. To render the canal serviceable to commerce there must be at its termini the men, the buildings, the machinery, the railroad connection, and the numerous other accessories to be found only where enterprise and capital have already found full exercise. To make the Hennepin Canal such, its western terminus along the line of the Meredosia would be to negative nearly every reason heretofore urging its construction and discommode the entire shipping and transporting public. It would be to construct a fiddle solely with reference to its easy and graceful bearing up of the fiddle strings, utterly regardless of the quality of tone to be evoked or the gratification of the audience gathered expectant to hear the music.

Very much could, indeed, be properly urged against the Meredosia route even from an engineering point of view. Every old resident is well aware that at times the entire

Meredosia bottom is swept by swollen floods, borne over it alternately from the Mississippi or the Rock River, which would bury far beneath their waves the very banks of the canal, should one there be constructed. Nothing less than a dike of three or four miles in length along the line of the Mississippi, and one, only less in length, on the line of the Rock River, could at all save the canal from destruction. Such a dike, however, would involve ruin to the cities and towns below. In times of extreme high water on the Mississippi the overflow through the Meredosia into the Rock River is as a safety-valve to a boiler under full pressure of steam.

It is enough, we are sure, to simply state these indisputable facts. Did they require enforcement, the records of the loss of property and life at the fall of the Western Union Railroad bridge at the Meredosia in 18—, caused by the rapid sweep of the current down the Meredosia from the Mississippi, would be sufficient.

In conclusion, as a confirmatory argument and appeal for the construction of the Hennepin Canal, allow us to solicit your consideration of the following newspaper report of a canal conference recently held in Belgium. In this is anew illustrated the fact that even Europe, where railways abound, enlightened statesmanship and progressive and sagacious enterprise are joining hands in securing large expenditures for the extension of canals in the interest of cheap transportation.

Very respectfully, yours,

EDWARD RUSSELL,
P. D. BUFORD,
For Committee in behalf of the Citizens of Rock Island, Moline, and Davenport.

General C. B. COMSTOCK, U. S. A.,
President of Board of Engineers, Rock Island, Ill.

APPENDIX TO THE ARGUMENT OF CITIZENS' COMMITTEE OF DAVENPORT, ROCK ISLAND, AND MOLINE, IN BEHALF OF THE HENNEPIN CANAL.

DAVENPORT, IOWA, *November* 16, 1886.

SIR: With much regret it is my duty to inform you and your honorable board that unexpected difficulties have attended the attempted fulfillment of the promise of the committee of citizens of Davenport, Rock Island, and Moline to present for your consideration some *special* and *late* statistical facts illustrative of the commercial argument in favor of the construction of the Hennepin Canal. A few such facts only have been collected and are herewith presented for your consideration.

It is, however, important to notice that the general and, indeed, the specific comparisons between the rates of freight tariff maintained where the railroads have no competitor in water-route transportation, or very little such, and the rates freely submitted to by railroads confronted by water-route competition remain, relatively, the same, with only exceptional and very slight variation, as for years past, so that the statistical facts which constituted the basis of the commercial argument for the Hennepin Canal presented in the official report of Maj. W. H. H. Benyaurd to the Secretary of War, for the first session of the Forty-eighth Congress; the facts which were embodied in the report, so far as related to the Hennepin Canal, made to the present Congress by the Senate Committee on Interstate Commerce, of which Senator Cullom was chairman, and the facts presented to the House of Representatives in the report on the Hennepin Canal bill, at the last session, by the Committee on Railways and Canals, these facts all remain unchallenged by the facts of the present navigation and transportation season.

Indeed, every obtainable fact of to-day relating to the transportation interests of the Mississippi Valley and of the entire Northwest does but confirm and amplify the facts heretofore given to Congress and to the nation.

Pray allow a single comment on these constantly sustained and incontrovertible verities. This is, that the intelligent argument for and plea for the construction of the Hennepin Canal all rest upon the foundation fact that water-route transportation constitutes the most surely and potential regulator and controller of railroad freight-tariff charges. If, therefore, it is at all the province of Government to so legislate as to protect, or seek to protect, the people from the burdens of freight charges, it is the duty of Government most clearly to maintain and extend the reach and operation of water-route systems of transportation wherever and whenever due opportunity is presented.

During the present season, to quote from the written statement of one of the largest, if not the largest, wholesale dry-goods and notions house in the Upper Mississippi Valley, the following freight rates have obtained:

On first-class goods, New York to Chicago, all rail, 75 cents per 100 pounds. Rail and water, 50 cents per 100 pounds. Hudson River, canal and lakes, 30 cents per 100

pounds. From Chicago to Davenport on same class, regular tariff rate, 50 cents per 100 pounds, for 183 miles. To four firms only, a special rate of 40 cents per 100 pounds has been made. This heavy freight charge it is urged could not possibly be thought of, much less charged and collected, did not the water-route competition of the route, New York to Chicago, end and cease operative force at the latter city. If that competition were extended to the Upper Mississippi by means of the Hennepin Canal, how great the saving to the people of this valley! The same reliable business authority gives these as the actual figures of the freight rates this season:

Davenport to La Crosse, Wis., 210 miles, by rail, on first-class goods, before navigation (by rail) 50 cents per 100 pounds. After navigation opened, by rail, 30 cents per 100 pounds. Same points by river, 20 cents per 100 pounds. Distance 241 miles.

Davenport to Winona, distance by rail 240 miles, rail rate before navigation, 60 cents per 100 pounds. Rail rate after navigation, 30 cents per 100 pounds. Same points by river, distance 272 miles, 25 cents per 100 pounds.

Davenport to Saint Paul, by rail, before navigation opened, 60 cents per 100 pounds. Same after navigation opened, 35 cents per 100 pounds. Davenport to Saint Paul by river, 25 cents per 100 pounds. All actual rates paid.

This same reliable authority comments:

"These are the outrageous extortions which are slowly but surely drawing the life out of the business interests, and therefore out of the people of the the Upper Mississippi Valley."

The manager of the mammoth plow-works of Deere & Co., of Moline, Ill., states that "The rates on iron and steel used by us are, from New York to Chicago, by rail, 30 and 35 cents per 100. From Pittsburgh to Chicago, by rail, 15 cents per 100. From Chicago to Moline, by rail, 10 to 15 cents per 100. Canal rates between this point and Chicago would be, from the best information we can obtain, half those now prevailing. The same would be true as to rates on our products, on which the freight charges average generally the same as on iron and steel to us. Our rates to Saint Paul vary from 25 cents per 100 in winter, when navigation is closed, to 12½ in summer, by rail, when the river offers competition."

The figures of this statement are exactly confirmed by those of other large manufacturing establishments in their immediate vicinity; also by those of heavy dealers in hardware, farm implements, &c. One of the largest of these houses gives a statement which shows a comparison between rates from Saint Louis to Davenport, thus:

By rail.—First class, 50 cents per 100 pounds; second class, 40 cents; third class, 30 cents; fourth class, 20 cents.

By river.—First class, 23 cents per 100 pounds; second class, 21 cents; third class, 15 cents; fourth class, 10 cents. Rates actually paid this season.

A wholesale grocery house, undoubtedly doing a heavier business than any other in that line between Saint Paul and Saint Louis, reports a schedule of rates paid this season by them substantially the same as the last above stated. Their lowest rate (fourth class) from New York to Chicago, all rail, has been 21 cents per 100 pounds, while from Chicago to Davenport, on same, their rate has been 18 cents. First class to New York to Chicago, 65 cents, and Chicago to Davenport, 50 cents. Saint Louis to Davenport, by rail, first class, 50 cents; fourth class, 20 cents. By river, first class, 25 cents; fourth class, 11 cents.

Four railroad freight agents, each of a different road, have given to shippers, through whom I applied for information, these inside rates:

La Crosse to Chicago, for wheat, 12½ cents per 100 pounds; McGregor to Chicago, for wheat, 15 cents per 100 pounds; Dunleith to Chicago, for wheat, 14 cents per 100 pounds; Duluth to Chicago, for wheat, water-route competition, 10 cents per 100 pounds. The last is thrice the distance of that from McGregor to Chicago.

Please notice particularly the contrast between all the rail charges on wheat from McGregor to Chicago, and that from Duluth to Chicago. From Peoria to Chicago is 159 miles; from Davenport to Chicago is but 183 miles; at Peoria the Chicago, Rock Island and Pacific Railroad has the competition of the Illinois River and the Illinois and Michigan Canal to Chicago.

The average actual freight charge on wheat this season has been, from Peoria to Chicago, 5 cents per 100 pounds, as per shippers' statement in my possession. From Davenport to Chicago the rate has varied from 10 cents to 12 cents per 100 pounds. No water competition between Davenport and Chicago.

An experienced steamboat captain and steamboat agent, for years an accepted authority in this region as to transportation rates for this paper, thus sums up the facts as to wheat transportation to Chicago by railroad and by river and canal:

During good stages of water wheat can be shipped from Saint Paul to Saint Louis direct, in barges, at 5 and 6 cents per bushel.

From up-river points to Rock Island the rate would be, Saint Paul to Rock Island, 4 cents per bushel; Winona and La Crosse to Rock Island, 3½ cents per bushel; McGregor to Rock Island, 3 cents per bushel; Dunleith to Rock Island, 3 cents per bushel.

In barges of 300 tons capacity, such grain could be carried without breaking bulk, directly on to Chicago from Rock Island at an additional charge of 2 cents per bushel; thus the rate to Chicago by river and Hennepin Canal would be contrasted with present all-rail charges thus:

Wheat freight to Chicago—From Saint Paul, by rail, per 100 pounds, 15 cents; same per river and canal, 9 cents. Winona and La Crosse per 100 pounds, 12½ cents; same per river and canal, 7 cents. McGregor, 15½ cents; same per river and canal, 7 cents. Dunleith, 14 cents; same by river and canal, 6 cents. Rock Island, 12 cents; same by river and canal, 3½ cents.

Lastly. Cheaper coal is an object of very great importance to the residents of the entire Upper Mississippi Valley. South of Saint Paul the anthracite coal supply is received through Milwaukee or Chicago, mainly through the latter. The consumption of that variety of fuel increases annually, despite the high rates which obtain therefor west of the lakes.

The facts in regard to the large and disproportionate freight charges prevailing west of the lakes on that product, that have before been cited to the attention of Congress, still have full force.

During the present season the average freight rate on Pennsylvania coal from Buffalo and Erie to Chicago, 900 miles, has been 64 cents per ton, the railroads generally meeting the lake rates. At the same time, and now, the regular rate by rail from Chicago rules at $2 per ton to all Upper Mississippi points, so that the price of such coal at such points rules at that additional to Chicago rates.

Were the Hennepin Canal in operation the additional rate could not exceed 50 or 60 cents, and the saving therein represented would extend to all interior Iowa, Nebraska, and Kansas, and Southern Minnesota. So, too, the bituminous coal fields of the Illinois River region have their products vastly enhanced in cost by the high rate of railroad freight; whereas barges laden with that coal could be taken through the Hennepin Canal to towns along the entire line of the Mississippi River up to Saint Paul and Minneapolis at a reduction over present cost of not less than 3 cents per bushel. At Davenport such coal now sells at 13½ cents to 14 cents per bushel, against 7 to 9 cents on the Illinois River.

Very respectfully, in behalf of the committee,

EDWARD RUSSELL.

General C. B. COMSTOCK, U. S. A.,
President of Special Commission &c.

ILLINOIS AND MISSISSIPPI RIVER CANAL.

SPEECH OF HON. JEREMIAH H. MURPHY.

The House being in Committee of the Whole on the state of the Union, and having under consideration the bill (H. R. 5869) to provide for the acceptance by the United States of the proposed grant of the Illinois and Michigan Canal, and all its appurtenances, from the State of Illinois, and for the construction of the Illinois and Mississippi River Canal—

Mr. Murphy said:

Mr. CHAIRMAN: I have thought it best to read as a part of my remarks the report of the committee, feeling confident that it will, perhaps, accomplish more good than any remarks I could make in the time occupied by the reading. The report is as follows:

"The Committee on Railways and Canals, to whom was referred the bill (H. R. 3022) to provide for the acceptance by the United States of the proposed grant of the Illinois and Michigan Canal, and all its appurtenances, and for the construction of the Illinois and Mississippi River Canal, beg leave to submit the following report:

"The Illinois and Michigan Canal extends from Chicago and the waters of Lake Michigan southwesterly to the city of La Salle, a distance of 96 miles, and there connects with the Illinois River improvement. This canal was built by the State of Illinois, aided by grant of lands from the United States, and has been in successful operation since its completion in 1847. It is 60 feet wide at water-line, with a water depth of 6 feet. The total cost of the work was $6,557,681.50. It has been the practice of the State to operate the canal on the policy of low tolls, and yet its net receipts over operating expenses amounts to $2,993,691.74.

"By an act of the legislature of Illinois, approved April 28, 1882, 'the Illinois and Michigan Canal, its right of way and all its appurtenances, and all rights, titles, and interest which the State has in any real estate ceded to the State by the United States for canal purposes,' was ceded to the United States upon the express condition that

the grant should be accepted within five years, and that thereafter the said canal should be maintained as a national water-way for commercial purposes, to be used by all persons without discrimination, under such rules and regulations as Congress may prescribe. This act was ratified by a large majority of the voters of the State, at the election of November 7, 1882.

"The proposed canal from Hennepin, on the Illinois River, to the Mississippi, is designated as the Illinois and Mississippi River Canal, and is known as the 'Hennepin Canal.' It has been surveyed by authority of the Forty-seventh Congress, under the direction of the Secretary of War, and the United States engineers report 'a perfectly feasible route' for a canal 80 feet wide at the water-line, with 7 feet of water. When completed direct water communication will be secured between the Great Lakes and the water-ways of the East to the Mississippi River on the west and the Gulf of Mexico on the south. The length of the line from Hennepin to the Mississippi at the mouth of Rock River is 74.5 miles. A feeder 37.1 miles in length is to be built extending to Dixon, on Rock River, and called the Rock Island route. Major Benyaurd, in his report, says of the dimensions of canal and locks:

"'It is proposed to make the canal and feeder 80 feet wide on the water surface, and 7 feet deep, with slopes of 1 on 1½. The locks for the main canal are 170 feet long and 30 feet wide. These latter dimensions were adopted after considering the question of low-water navigation on the Upper Mississippi as affecting barge transportation. The hull measurement of the larger size barges adapted to the passage of the locks is, according to the custom-house authorities, about 300 tons, though with deeper water afforded by higher stages of the river, and also by the proposed dimensions of the canal, such barges can, with the box-top, carry over 600 tons; but we had to be governed by the minimum draught of the boats at the most unfavorable stage of the main river.

"'The same lock dimensions for the Hennepin Canal were also adopted by Colonel Macomb in the report of 1874, in connection with the subject of transportation routes to the seaboard.'

"The estimated cost of constructing this canal and feeder, including right of way, is $6,672,890.67; the estimated cost of enlarging the Illinois and Michigan Canal, $2,298,919.15; total, $8,971.809.82. This estimate is for the construction of what is known as the Rock Island route, which is recommended by the committee.

"The proposition in the bill is to accept of the proffered grant of the Illinois and Michigan Canal made by the State of Illinois on the terms proposed, and to construct, under the direction of the Secretary of War, the Illinois and Mississippi River Canal (called the Hennepin), thus connecting the great water systems of the East and West.

"Your committee deems it necessary to enter more fully into a description of the proposed canal in this report, but would respectfully call the attention of the House to considerations in favor of the passage of the bill.

"WHY THE BILL SHOULD BE PASSED.

"The four great departments of industry which give employment to our people are agriculture, mining, manufactures, and commerce, and that it is the duty of the Government to promote and protect each of these branches by wise and appropriate legislation is acknowledged by all, and it must be conceded that the cost of transportation is a factor of the highest importance, not only to these industries, but, as we hope to show, to the whole country.

"In discussing this question it must be borne in mind that the agricultural districts, which furnish a surplus of wheat, corn, oats, and barley, lie west of the Alleghanies, and for the most part these cereals are produced in the great valleys of the Mississippi and Missouri and their tributaries. The distance, then, that these products of the farm must be transported to find a market is very great, whether that market be furnished by the more sterile eastern portion of our own country or abroad, whether in New England or Great Britain. It is, moreover, apparent that to the producer every dollar of the cost of transportation he is obliged to pay in reaching a market which might have been saved is a burden laid upon him without a compensation, and for which there is no justification. A farmer who declines to adopt such improvements as will enable him to produce a crop of corn or wheat at the least possible cost will soon find himself distanced in the race for success. This is equally true of a Government to which is intrusted the legislation necessary to insure the cheapest modes of marketing the products of the soil. In this active and intelligent age the laggard nation is left behind.

"Railway rates on wheat mount up to from 12 to 15 cents per bushel between Chicago and New York as soon as lake navigation ceases, while in summer it is scarcely half the higher figure. The proportionate charge by rail for the transit of a bushel of wheat between Chicago and Buffalo would be in the winter from 6 to 8 cents, while by lake it is generally 2 cents, and often less than that. The freight on a bushel of

wheat between Saint Paul and Chicago is from 12 to 15 cents, while Major Benyaurd has shown that by the Mississippi and the Hennepin Canal it would not exceed 6 cents. Now, why this difference? We answer that it is owing to the existence of the great lakes and of the Erie Canal, a free water-way on which heavy articles can be carried at less cost than is possible by railways, and with which pooling and combination to maintain prices is impossible.

"Take another illustration, furnished in the transportation of anthracite coal. This fuel is wanted for consumption in almost every city and village in the great Northwest, and if the rates of transportation were reduced, as would be the case if the Hennepin Canal was in operation, the market for this mine product would be increased many fold. This coal is now taken from Erie, Pa., and from Buffalo to Chicago for 60 cents per ton, while the railways west from Chicago charge $2 per ton freight from that city to the Mississippi River.

"Now, if this canal was in operation freight on this coal would not exceed 50 cents per ton, thereby saving $1.50 per ton over present railroad rates, and the saving on salt, iron, nails, oil, glass, paints, and all heavy merchandise would be equally great.

"Not alone in grain and coal will the construction of this water connection between the two great national water systems of the country prove beneficial to both producers and consumers, but it is believed that it will prove a substantial blessing to every manufacturer and employé in all New England, New York, New Jersey, Pennsylvania, and Ohio. In short, it will be the great reducer and regulator of freight rates from the Missouri and Mississippi to the seacoast. It will enable the manufacturer to obtain a larger and a better market and the producer a higher price—a benefit to all.

"Is further argument necessary to convince the most skeptical that the construction of this canal, thus forming a link that will connect the great Mississippi River with the lakes, thereby furnishing an all-water route to the commerce of the East and the produce of the West and Northwest, is urgently demanded? As it may be asked what relief would that afford, we answer, what relief do the lakes, the Erie Canal, and the Hudson River afford? Let us see: All-water rates on grain from Chicago to Buffalo, a distance of 1,000 miles, are often but 1½ cents per bushel, and contracts have been made from Chicago to New York, including transfer charges, for 6 cents per bushel. Hence, is not the conclusion inevitable that if the Hennepin Canal is built and an all-water communication furnished from all points on the Mississippi and Missouri rivers to the lakes the present freight charges will be reduced more than 50 per cent.?

"The railroads are charging from the Mississippi and Missouri valleys to Chicago from 12 to 15 cents per bushel. Now, if this canal were constructed, wheat would be carried by water at from 3 to 5 cents per bushel from corresponding points, which would be a saving over present railroad rates of from 8 to 10 cents per bushel; and the saving would be equally great on oats, corn, and other products. But suppose the saving to be only 5 cents per bushel over present railroad rates, there would be a saving amounting to millions of dollars annually, which would be left in the pockets of the people, and not find its way into the pockets of railroad magnates. It is thus clearly seen that the saving, over present railroad rates, in one year would widen and deepen the Michigan and Illinois Canal and construct this canal over and over again.

"Your committee, in giving this question that careful thought and consideration which it merits, is not unmindful of the fact that this question of interstate commerce has been agitated by the public and on the floors of Congress for years, in the vain hope that some relief would be furnished the people by reduction in transportation rates, and we are sorry to say that so far no practical good has resulted; hence we think it would be an act of wisdom on the part of this Congress if it would improve and extend our water communications, and thereby furnish a little practical relief.

"Your attention is called to a communication on this subject, addressed to the legisature of New York by that distinguished statesman ex-Governor Seymour. He says:

* * * "'A false and mischievous idea has grown up in our country that Europe depends upon us for food. This is not true. They can get all they want from many parts of the world; from India, South America, and Australia. In South America vast herds of cattle are killed merely for their hides. The carcasses are left to decay. Great Britain, which buys more of our provisions than any other country, is building railroads in Northern India to cheapen transportation, and in sending farming tools into that region to improve its agriculture. This policy has been followed by a great increase in its production of grain. Within a few years the exports of wheat from India have grown up to many millions of bushels. The governments of Europe are trying to lessen our exports as they give us such heavy balances against them. For this reason, Germany and France shut out our pork, and other governments show great uneasiness as we disturb their relationship to their people. Our only course is to undersell other countries; as labor is higher here than elsewhere, we must depend upon smaller charges for carrying. That region is fast becoming one of our strong competitors.

"'"We only sell to Europe because we have cheaper modes of sending our products to their markets. We have been able to do this because we have cut down the cost

of carrying. Our exports grow up as carrying rates are cut down. Railroads have always followed lower rates upon water routes, but the last are the cheapest, as is shown by the table of rates in the report on commerce and navigation of the General Government. Our agricultural interests are the most important of all. When water routes are closed by winter, railroad rates go up; when tney are opened in spring, rail rates go down. * * * We are now able, if we are wise, to overcome the greater cost of production in our country, owing to our higher wages, by our cheaper transportation. We are to have a hard struggle to keep our lead as a food-supplying country, and we must give up the delusion that Europe depends upon us for food. It will only buy of us if we can deliver it to them at the lowest cost. The delusion that the Old World depends upon us for food stimulates extravagance in Congress and corruption in legislatures. If we fail to uphold our water routes as protection against unjust and unwise charges for transportation we shall suffer in the future."'

"INTERSTATE COMMERCE.

"The question of interstate commerce and of cheapening transportation has engaged the attention of the whole country for years. This agitation led the Senate in the last Congress to appoint a committee of able and experienced Senators, who have recently reported the results of their investigations in an able paper. A careful examination of that report fully discloses the difficulties that lie in the way of so controlling railways as to permit of no injustice being done to the people or to these corporations.

"The aggregate capital of the railway corporations of the United States is believed to be over $8,000,000,000. Their affairs are conducted by the best business talent the country affords; they have before them the very natural object of making their investments pay, and although these corporations are in all respects amenable to the State and National Governments which created them, yet they have rights that must be respected, and they have interests that must be protected; for the whole country has shared, and must continue to share, in the benefits and blessings of our unequaled extent of railway facilities. But conceding all this does not justify the conclusion that the Government, by whose authority these corporations have life, should place in their hands the exclusive inland carrying trade of the country. Railway rates should be regulated in the interests of the people, and your committee are of the opinion that free water transportation is well calculated to secure that end. On this point the testimony taken by the Select Committee of the Senate on Interstate Commerce is so conclusive, and applies with such force to the proposed Hennepin Canal, that your committee insert their conclusions in this report:

"THE EFFECT OF WATER COMPETITION UPON RAILROAD CHARGES.

"'The evidence before the committee accords with the experience of all nations in recognizing the water routes as the most effective cheapeners and regulators of railway charges. Their influence is not confined within the limits of the territory immediately accessible to water communication, but extends and controls railroad rates at such remote and interior points as have competing lines reaching means of transport by water. Competition between railroads sooner or later leads to combination or consolidation, but neither can prevail to secure unreasonable rates in the face of direct competition with free natural or artificial water routes.

"'The conclusion of the committee is, therefore, that natural or artificial channels of communication by water, when favorably located, adequately improved, and properly maintained, afford the cheapest method of long-distance transportation now known, and that they must continue to exercise in the future, as they have invariably exercised in the past, an absolutely controlling and beneficially regulating influence upon the charges made upon any and all other means of transit.'

"WHEAT AND CORN.

"As per official estimate the crop of wheat for the year 1884 in the Upper Mississippi States was 188,349,000 bushels, and of corn, for the same year, 837,574,000 bushels, making a total of 1,025,923,000 bushels of these two staples. Now, it is well known that the market value of this vast amount of grain is determined by the price that can be obtained abroad for so much of it as seeks a foreign market. The cost of production and the cost of transportation has nothing whatever to do in determining the price. Is it not, then, perfectly clear that whatever is saved in the cost of transportation is an absolute gain to the producer, and, therefore, a failure to secure any possible saving in the transportation lays a burden unnecessarily upon the producing farmers of the West.

"To more definitely show the immense saving which would be effected by the construction of the proposed canal, your committee would again call attention to the amount of wheat and corn produced in the States of the Upper Mississippi Valley in 1884, as above stated, showing a total of 1,025,923,000 bushels. Now, suppose one, half is shipped eastward for consumption and for export, and the saving is only 2 cents per bushel, it reaches over $10,000,000 in a single year, whereas, as is believed the saving is equal to at least 5 cents per bushel, and you have the fabulous sum of over $25,000,000 annually, to say nothing of the saving on heavy articles going West, which would amount to many millions more.

"THE EFFECT OF FREE WATER TRANSPORTATION ON RAILWAYS.

"Your committee are unwilling to admit that cheapening transportation on heavy articles, thus benefiting the people, will result in damage to the great railway interests of the country; on the contrary, we believe that whatever is for the general good, will in the end prove beneficial to our railways.

"We do not desire to antagonize the railways, which have done so much to develop the country generally and the Great West in particular. The place these public corporations have to fill is to serve the purpose of rapid transit for passengers and mails, and such freighting as can bear the charges imposed without inflicting a loss on the consumer or producer that is burdensome, but in the matter of all heavy freights not requiring special speed it is now demonstrated that our extended national water-ways must be brought into use. Missing links like the Hennepin Canal must be constructed, and the crippled industries of our country must thereby be restored to a condition of health and prosperity.

"NATIONAL CHARACTER OF THE WORK.

"Your committee would point to the important fact that when the Illinois and Michigan Canal becomes a national work, and the 'Hennepin' a part of the same, then will there be a great public water-way connecting Chicago with Saint Louis and New Orleans, on which fleets of barges towed by steam will ply and connect these three great cities of the West.

"The sugar, rice, and cotton of the delta of the Lower Mississippi and the valuable lumber of Alabama, Arkansas, and Tennessee will have another outlet at rates which will leave the producer a fair margin, while the produce and manufactured articles from the North will find their way to the consumers of the South at living rates of freight.

"When, as it is hoped in the near future will be the fact, we have either a canal cut through the isthmus, or a way provided for carrying over it our merchant vessels as they ply between New Orleans and the various sea-ports of our neighbor republics of South America, laden with the interchangeable products of the Northern and Southern hemispheres of the American continent, then our city of New Orleans should be, and we hope will be, in readiness to become the great metropolis of the South as New York is of the East, and will be equipped with a water course permeating every part of our great Mississippi Valley, ay, and through the great lakes to the Gulf of Saint Lawrence.

"EFFECT ON OUR EXPORT TRADE.

"Your committee would be unfaithful to the interests of this great internal improvement if they failed to call the attention of the House to the intimate connection that exists between our export of cereals, especially of wheat, and cheap transportation. The States of Illinois, Iowa, Missouri, Minnesota, Kansas, and Nebraska, all lying westward from Chicago, are large wheat-producing States. For many years the surplus wheat and flour of the United States have found a market in Great Britain, but it has already transpired that we are severely menaced with competitors for this great market, a fact that demands our serious attention.

"Our shipments of cereals to foreign markets have gradually fallen off. In 1880 our exports of these commodities amounted to 288,000,000 bushels, and decreased from year to year until in 1885 the shipments had fallen to 162,000,000, being a decrease of 126,000,000 in five years. During the same period there has been a constant increase in wheat shipments to the English markets from Australia, Russia, and India. The increase in exports of wheat from the latter country have been most remarkable. In 1872 the first experimental cargo came to Liverpool from India. In 1875 she sent only 1,500,000 of bushels; in 1882, 37,000,000, and last year India shipped to England over 60,000,000 of bushels.

"WHAT ENGLAND IS DOING IN INDIA.

"How comes it to pass that the shipments of wheat from India have increased so enormously? The answer is that the English Government has expended large amounts of money, over $100,000,000, to cheapen the transportation of wheat from inland India to the seaboard, and thus the production of wheat, which before was without a market, has been largely increased. What, then, is the duty of the American Congress? Shall we yield the contest for a market without a struggle? Shall we not rather begin now to improve our natural water courses and to construct such connecting links as the Hennepin Canal, to the end that the remote portions of our great country may be brought as near as possible to the sea by cheap freights, and thus maintain a foreign market for our surplus?

"The period will doubtless come in our country when, with a largely increased population and a diversified industry, all of our tillable soil will be required to produce the breadstuffs we shall then need for home consumption; but time enough must elapse before we reach that point to justify a determined effort on our part to maintain for our surplus cereals that foreign market we have so long enjoyed. Suppose we fail in this, and as a consequence the balance of trade turns against the United States: will any one contend that financial disaster and commercial ruin would not be the result? If we would avert the dire consequences that most certainly would follow such a changed condition of our foreign trade, we must see to it that our inland rates of transportation on our surplus cereals are reduced to a minimum, and your committee believe that the construction of the proposed canal would do more to accomplish that end than would be possible in any other expenditure of the same amount of money.

"SHALL THE UNITED STATES BUILD THE CANAL?

"But, says the objector, you may be correct in your estimate of the great importance of cheap inland transportation; it may be true that agriculture, mining, manufactures, and commerce may all be greatly benefited in the way you describe, but it is not right for the General Government to undertake to build canals within States; the States through which these public improvements may chance to be located should construct at their own cost.

"When the Hennepin Canal is in operation, its benefits will be felt in every county between the Mississippi and Missouri Rivers, and in Kansas and Nebraska as well. Indiana and Ohio will send their bituminous coal, and Pennsylvania her anthracite and her iron ore more cheaply to the West, and so will New England and New Jersey feel the influence of reduced rates of freight; while the Empire State, with her unrivaled metropolitan seaport, will share with Philadelphia and Baltimore in the increase and permanence of a foreign trade, which without cheap inland freight would not exist. Shall it be said that Illinois should do all this? Nay, verily. Your committee are brought to the conclusion that too much has already been done by the General Government in the improvement of our water-courses to allow such an unjust policy to prevail; too many millions have already been expended on improvements not a whit more national in their character than the canal, by which it is proposed to simply remove an obstruction that nature has left in the way of connecting the waters of the Gulf of Saint Lawrence with those of the Gulf of Mexico, to justify the conclusion that any single State should construct this canal.

"COMMENDATIONS AND INDORSEMENTS.

"No public improvement, in the knowledge of your committee, has received the indorsement that this has. As early as the year 1845 a water convention was held at Memphis, Tenn., with Hon. John C. Calhoun, that strict constructionist of South Carolina, as presiding officer. It was represented by five hundred and fifty-three gentlemen from sixteen States, and the following resolution passed that body unanimously:

"'*Resolved*, That the project of connecting the Mississippi River with the lakes of the North by a canal, and thus with the Atlantic Ocean, is a measure worthy of the enlightened consideration of Congress.'

"In 1872 the President of the United States called the attention of Congress to this canal and other water improvements, and suggested the selection of a committee, with power to investigate and act. In compliance with the President's wish, the Senate selected seven out of that body, Senator William Windom, of Minnesota, being its chairman.

"By referring to page 233 of the report made by that committee to the Senate you will find the following statement made:

"'The freight charged by the Chicago, Rock Island and Pacific Railway Company is 8 cents per 100 pounds from Henry to Chicago, between which points there is wa-

ter competition, while the rate to Tiskilwa, only 12 miles farther west than Henry, and beyond the effect of canal competition, is 15 cents per 100 pounds, nearly as much for 12 miles as for 100 miles.'

"And it is proper for your committee to state that both these points are on the proposed canal, Henry east of Hennepin and Tiskilwa west.

"A further reference to that report of the Senate committee will show its indorsement and strong reasons why it should be constructed in the interest of commerce. The general assembly of the State of Iowa did, in 1864, in 1870, in 1874, in 1880, in 1882, in 1884, and at the present session of its legislature, memorialize Congress for the construction of this canal. Illinois, through its legislative body, has also repeatedly memorialized Congress and requested its representatives to support this improvement. The legislature of New York has twice passed resolutions, almost unanimously, urging Congress to construct this canal, and requested its representatives to vote an appropriation therefor.

"In 1884 President Arthur saw proper to call the attention of the Forty-eighth Congress by special message to the public importance of this water communication, and therein recommended its consideration.

"The Forty-seventh Congress ordered a survey of said canal and appropriated $30,000 to pay the expense.

"Maj. W. H. H. Benyaurd, of the Civil Engineer Corps, made said survey, and his reports and estimates are on file, and we are confident that a careful perusal of said report will satisfy the most skeptical that this canal should be built because of its worth and merit.

"Every convention that has been held in the interest of western water-ways has given this canal a favorable indorsement. We will refer to a few particularly: One in Saint Louis, in 1880; one in the city of Davenport, Iowa, in 1881; one in New Orleans, in 1885, and one in Saint Paul, last September. These conventions were composed of hundreds of delegates, representing all the States in the Mississippi and Missouri Valleys, North and South, with governors, members of Congress, and United States Senators of those States, and it pleases your committee to say that after careful and general discussion all of these great bodies passed resolutions unanimously indorsing the construction of this canal, and urging Congress to make an appropriation therefor.

"It has been indorsed twice by the National Board of Trade, held in Washington in July, 1884 and 1885, and by the Industrial Congress, held in Chicago in May, 1884.

"In March, 1885, a select committee was appointed by the Senate to investigate and report upon the subject and regulation of transportation by railroad and water routes. By reference to pages 167 to 175, inclusive, it will be seen that that committee, after careful investigation, concluded that this water improvement was absolutely necessary in the interest of commerce, and that the General Government should, without further delay, make the necessary appropriation. The last Congress was petitioned by the leading wholesale merchants, business men, and manufacturing companies of New Haven, Meriden, Norwich, and Hartford, Conn.; of Manchester, N. H.; of Fitchburg, Worcester, Springfield, Pittsfield, North Adams, and Holyoke, Mass., and of Pittsburgh, Pa.

"The commercial bodies of Chicago, Saint Paul, Minneapolis, Saint Louis, La Crosse, Duluth, Davenport, Muscatine, Rock Island, Buffalo, Syracuse, and New York have all memorialized Congress for its construction.

"The New York Board of Trade and Transportation has a membership of one thousand business firms in New York City. It devotes its income and time to the consideration and decision of questions of public interest. It is not a trading body. Twice this board has indorsed the 'Hennepin Canal,' after careful consideration and full discussion.

"Your committee would call particular attention to the language of one of these indorsements, namely, the Produce Exchange, of New York. They number three thousand members, and they never take action without careful deliberation by reference to proper committee, and then act on their report. And it must be said to their credit, they gave this canal their unanimous indorsement, which was prefaced by saying:

"'That this was the first time since their organization that they had recommended the General Government to aid or construct internal improvements, or had asked or advised their representatives in Congress to vote appropriations for any internal improvement of any kind; that this was an exception; and if they were not firmly convinced that it had merit they would not depart from their universal rule.'

"WOULD THE EXPENDITURE BE A PROPER ONE?

"Again it may be thought that the amount required to construct the 'Hennepin' and improve the present canal ($9,000,000) is too large a sum for such a locality.

"Reference has already been made to the saving of $10,000,000 per annum on grain freights alone, which it is believed this great improvement will secure, and in this con-

nection your committee beg leave to refer to the amount of internal-revenue tax collected in the last fiscal year from the States that produce so largely the cereals for which cheap transportation will be secured by building this canal:

Illinois	$23,075,864 61
Iowa	2,222,059 15
Kansas	170,202 02
Nebraska	1,971,296 12
Minnesota	492,704 97
Missouri	6,276,165 85
	34,228,292 72

"It will be seen that a small percentage of the amount thus actually paid into the United States Treasury annually by the States named would build the 'Hennepin' and improve the Illinois and Michigan Canal as proposed; and it should not be forgotten that the people of these States contribute their full share to the payment of whatever of duties on imports are laid to raise the revenue and to protect the manufacturing industries of the country. These States do not come here to ask for themselves special favors, but only that which is manifestly for the interest of all sections and to the injury of none.

"The people of these States are as intelligent, as enterprising, and as fair-minded as any other, and it is not too much to say that, in the name of fair play, they insist on the construction of this great improvement.

"Whenever it shall be in the future, as it has been in the past, that the great Northwest shall be called on to vote for the improvement of our harbors and rivers, or to do anything properly demanded in the interest of commerce, its representatives will not withhold the needed aid; and your committee will not doubt but that Congress will, by the passage of this bill, accept the grant of the Illinois and Michigan Canal, generously offered by the State of Illinois, and construct the Illinois and Mississippi River Canal, thus uniting the great water systems of the East and West and of the North and South in one grand highway for internal commerce.

"Your committee therefore, in consideration of the importance of the construction of the Hennepin and Rock Island Canal and of the enlargement of the Illinois and Michigan Canal, in the interest of the great and rapidly growing commerce of the country and of the people, and especially of the Northwest, report back said House bill 3022 with a substitute, and recommend the passage of the substitute."

Mr. MURPHY. Mr. Chairman, is it not an admitted fact that no other country has so many great rivers and lakes, extending from the far interior to the tide-water in so many directions, as ours; great navigable channels for commerce, with comparatively few obstructions? And who says these obstructions shall not be removed, the channels opened, widened, and deepened, so that Congress can have some hope in the near future to render aid and comfort to the producer of the Northwest and furnish help and contentment to the consumer of the East, a universal blessing, that all good people would take pride in? For the true object in life is happiness, and, as governments are founded solely for the benefit of the governed, why should not this Government, as a blessing to our people, improve our natural water-ways and construct artificial ones, when such action will be productive of so much good?

Yes, Mr. President, transportation by water is admitted to be the cheapest possible the world over, and we, the American people, who boast that we are correct by instinct, have made the least water improvement for navigation in the interest of commerce of any civilized nation.

For who does not know that the sum total for internal improvements in this country is utterly insignificant when compared with those of European countries of far less financial ability?

Now, in modern times civilization has but two modes of transportation—by rail and by water. Has not the Government of the United States furnished hundreds of millions of dollars to aid railways that are private corporations and under the control of persons and individuals? For we all know that this question of interstate commerce, in a blind effort to furnish a remedy by Congressional action, has so far proven abortive and done no good, that State assistance and legislative action have accomplished but little. And I am confident that when the Congress of these United States found no legal or constitutional objection to voting aid and assistance to private corporations, in the interests of the public, it ought not and will not hesitate to grant the same aid and assistance to improve our natural water-ways and construct artificial ones when it is seen that necessity demands them as the only correct and certain regulators of railroad rates. And it ought, and will, give to the commerce of the East and the producers of the West and Northwest the cheapest possible transport, which is by water.

Mr. Chairman, the construction of this canal will connect the Upper Mississippi with the great lakes, and 600 miles of that Father of Waters will be made available and will make navigation continuous and complete from the city of Saint Paul to the great lakes, and thence to the seaboard, a distance of 2,000 miles. You may ask, what is the inducement? What relief would that afford? I answer, what relief do the lakes, the Erie Canal, and the Hudson River afford? Why, rates on grain from the Western lake ports to Buffalo, a distance of 1,000 miles, are often but 1½ cents per bushel—it has been shipped for less—and contracts have been made from these ports to New York, including transfer charges, for 6 cents per bushel. Hence will any one doubt or dispute the statement that, if this canal is built and an all-water communication furnished from all points of the Mississippi River to the lakes, the present freight charges will be reduced from 50 to 75 per cent.; that instead of paying 12 to 15 cents per bushel it will be carried from 3 to 5 cents per bushel; which saving will leave in the pockets of the producers millions that are now paid out to railroad corporations and companies. And what is true of the grain shipped East is equally true of merchandise shipped West. Take, for example, by way of illustration, the anthracite coal of Pennsylvania, which you well know is consumed in large quantities in the Northwest since the introduction of base-burning stoves into domestic economy. This coal is brought by water from Erie, Pa., and laid down in Chicago, a distance of over 1,000 miles, for 60 cents per ton; and you all know it costs to-day $2 per ton to transport this coal to the Mississippi River, a distance of less than 200 miles.

Now, construct this Hennepin Canal and it will not cost 50 cents per ton—thereby a saving of $1.50 per ton over present railroad rates. What is true of coal is equally true of salt, nails, oil, glass, lumber, iron, paints, and all other heavy merchandise, and equally true of Eastern shipments of all kinds of grain and farming products.

And, Mr. Chairman, I now make the statement that, by comparison and mathematical calculation, if you adopt this report, and this great water way is opened from the Mississippi and Missouri rivers to the lakes, for the surplus grain of the States of Illinois, Iowa, Kansas, Nebraska, Minnesota, and Wisconsin, there will be a saving of 6 cents per bushel over present railroad rates now charged, and 6 cents per bushel would amount to $31,326,105.50. This is no dream of fancy, for the annual report of the Board of Trade for the city of Chicago, which is as follows, proves its correctness, which I now read:

"4. The vast volume attained by the annual cereal product of the States directly tributary to the Upper Mississippi presents yet additional support to the plea for an all-water transportation route to the East. The annual report of the Chicago Board of Trade for 1882 estimates the crop yield thus:

	Illinois.	Iowa.	Kansas.	Nebraska.	Minnesota.	Wisconsin.
	Bushels.	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*
Wheat	52, 302, 900	25, 487, 200	33, 248, 000	14, 947, 200	37, 030, 500	20, 145, 400
Corn	187, 336, 900	178, 487, 600	150, 452, 600	82, 478, 200	21, 127, 600	30, 201, 600
Oats	18, 696, 000	99, 141, 000	29, 700, 000	44, 555, 700	9, 417, 650	12, 780, 800
Total	258, 335, 800	303, 115, 800	213, 400, 600	141, 981, 100	67, 575, 750	63, 127, 800

"Thus is presented a grand total of 1,047,536,850 bushels as the product of three cereals only in a single year from six States, constituting only a part of the widely extended area certain to be affected and benefited by an extension to the Upper Mississippi of the water-route system of transportation reaching westward from New York, but now having its western terminus at Chicago. But consideration of these facts would be seriously incomplete were it not made to include the fact that, vast as are the aggregates of productions in the States named for the year 1882, they are certain to be yet largely increased year by year. Comparative statistics are almost startling in that regard. Thus, as a single illustration where many might be given, the wheat product of Iowa from 1849 to 1860, as shown by carefully compiled statistics, aggregated 50,000,000 bushels; from 1860 to 1870, 195,000,000; from 1870 to 1881, 375,000,000 bushels. Of corn the yield was, from 1849 to 1860, 250,000,000; from 1860 to 1870, 550,000,000; and from 1870 to 1881, 1,800,000,000 bushels. Estimating the wheat at 85 cents per bushel and the corn at 35 cents, a curious statistician has recently shown (see Clinton Iowa Agriculturalist, February 2, 1883) that the total value of these two crops in Iowa, excluding those of 1882, would equal $1,177,000,000, or more than the highest estimate of the value of all the gold product of California from its discovery on June 19, 1848, to June 30, 1881."

Yes, Mr. Chairman, it is admitted and cannot be denied but that cheaper transportation is absolutely necessary if we intend to find a market abroad for our surplus

products. For it is a maxim in commercial law that man will buy where he can buy the cheapest and sell where he can sell the dearest, and as experience shows that water routes are the cheapest, why should not we improve our natural water routes and construct artificial ones, when, like the Erie Canal and this canal, they only form connecting links? And I refer in this connection to the following statement by Mr. Horatio Seymour, jr. He says:

Experience shows that water routes are the cheapest for many kinds of transportation, as will be made clear by the following statement:

Average rate per bushel of grain.

Year.	Chicago to Liverpool.			New York to Liverpool.	
	By lake and canal.	By lake and rail.	By all rail.	Steamer rates.	Sailing vessel rates.
1868	25.3	29.0	42.6	14.36	.....
1869	24.1	25.0	35.1	12.98	.....
1870	17.5	22.0	33.3	11.56	.....
1871	21.6	25.0	31.0	16.32	.....
1872	26.6	28.0	33.5	15.28	.....
1873	19.2	26.0	33.2	21.12	19.82
1874	14.2	16.9	28.7	18.16	15.66
1875	11.4	14.6	24.1	16.14	14.24
1876	9.7	11.8	16.5	16.04	15.28
1877	7.5	15.8	20.3	13.86	13.52
1878	10.1	11.4	17.7	15.22	14.18
1879	13.0	13.3	17.3	12.40	11.80
1880	13.2	15.7	19.7	11.76	10.20
1881	18.6	10.4	14.4	8.16	9.50
1882	8.7	10.9	14.6	7.76	.....
January 1 to November 1, 1883	9.16	12.0	16.1	.....	.....
Six months, January 1 to July 1	.....	.....	.....	9.08	12.50

It will be seen from the foregoing statement that the average difference in an all-rail route of transport from Chicago to New York of grain since 1868 to 1882 is a saving of 9¾ cents per bushel on the average by an all-water route over an all-rail route. And this saving on the amount we shipped abroad in 1880, which was 288,000,000 bushels, as given by official statement, would be two millions eight hundred and odd thousand dollars. And as our foreign shipments are only about one-half that is transported from the West to the East, we can correctly calculate on at least $2,000,000 more saved by an all-water transport for home consumption. That would make $4,800,000 saved by water transportation over rail routes from Chicago to New York in one year, and if the saving on Western shipments was an equal sum, that would be a saving of $9,600,000; and in this connection I wish to call your attention to the reports of the leading trunk lines, collated by Mr. Joseph Nimmo, jr., in a table illustrating the successive reduction of freight charges on those roads and on the Erie Canal, respectively, which furnish striking evidence on this point. I read from Internal Commerce of the United States for 1880, appendix, page 230:

"Of twelve of the railroads therein enumerated, maintaining an average freight charge of from 1.85 to 3.168 cents per ton per mile, respectively, in 1868, the only ones maintaining for the year 1880 an average freight charge of .88 of a cent per ton per mile were those having no water-route competition. This is a summary of that exhibit as to the charges for 1880 per ton per mile.

"RAILROADS HAVING COMPETITION IN WATER ROUTES.

	Per ton per mile.
New York Central Railroad	$0 00.88
Pennsylvania Railroad	00.88
New York, Erie and Western Railroad	00.84
Philadelphia and Erie Railroad	00.56
Lake Shore and Michigan Southern Railroad	00.75
Michigan Central Railroad	00.842
Pittsburgh and Fort Wayne Railroad (for 1879, for 1880 not given)	00.76

"RAILROADS NOT COMPELLED TO MEET WATER-ROUTE COMPETITION.

	Per ton per mile.
Boston and Albany Railroad	$0 01.20
Chicago, Burlington and Quincy Railroad (for 1779, for 1880 not given)	01.023
Chicago and Northwestern Railroad (for 1879, for 1880 not given)	01.49
Chicago, Milwaukee and Saint Paul Railroad (for 1879, for 1880 not given)	01.76
Chicago, Rock Island and Pacific Railroad (for 1879, for 1880 not given)	01.21
Erie Canal rate for 1880	0 00.49

"Thus it will be seen that the four leading trunk railroads running to Chicago from the Upper Mississippi Valley States maintained an average of .63 of a cent per ton per mile freight charge in excess of the average freight charge of seven other trunk railroads eastward of Chicago, where tariff rates were, as Mr. Fink has explained, constantly under the control of the potentially operative competition of the water routes of the lakes and the Erie Canal. The fact thus cited to attention is a very important one. Its existence is urged as furnishing an argument for the opening up of an extension of the water route of the lakes to the Upper Mississippi so strong that its force can neither be moderated nor escaped."

Is any more argument necessary? Will any more be required to support the proposition that if the Government of the United States will do its duty to the people and construct this canal the people of the Northwest can save 50 per cent. over present rates of transportation, and 50 per cent. would amount to over $10,000,000 annually? And when you add to that a corresponding saving of 50 per cent. to the Eastern people on their manufactured goods and other products, that would be a saving of $10,000,000 to them, making an annual saving over present rates of $20,000,000. Thus it can be seen with the naked eye that the saving over present railroad rates in one year would build the canal three times. Hence, in the light of the foregoing, will any gentleman on this floor contend for a moment that this internal (not as it is sometimes termed, "infernal") improvement is not worthy, meritorious, and necessary? This is no local matter, for cheap transportation benefits the consumers and producers alike. It is true the farmers were more urgent in demanding these improvements, because cheap transportation is indispensable to foreign markets for their surplus grain. And is there any question more seriously agitated by the public to-day, or of so much importance as to guard with zealous care the agricultural interests?

For you all know it has been the greatest factor in the commercial prosperity of this nation, and will continue to be, if right and justice is done. You may ask what special rights the farmer has over any other class for consideration. I will answer: They have all the right which the furnishing of 80 per cent. of all our exports during the last sixty years can give them, and they have the further right—they furnish the production from whence comes our internal revenue.

So, you see, all the other interests combined export only one-fifth as much as the farmers, and any one of them has received five times as much care, aid, and protection from this Government. Will this continue? If we act wisely it will not, but if we act unwisely, and fail to do our duty by constructing this canal and improving all our water ways, thereby increasing our facilities and reducing the present cost of carriage, we will find that our producing rivals, Russia, Australia, and India, will supply the Liverpool market instead of the United States of America. For if that market takes its supply from these nations, our surplus will be a burden; and, believe me, this is no dream of fancy, for a casual investigation will show the situation and danger.

Will any one deny that it is a maxim of commercial law "that man will buy where he can buy the cheapest, and sell where he can sell the dearest?" And hence, is it not a mathematical conclusion that the saving of 5 to 10 cents per bushel on our hundreds of millions of surplus, in its carriage, would find a demand that if not saved it would not? And is it not wise and just to protect our farmers, and let them enjoy in the future, the same as in the past, the sunshine and comfort that $200,000,000 will furnish from the sale of these surplus products abroad? For if we have a foreign market that is the amount we will receive.

Yes, my friends, investigation tells us that we have to-day formidable competitors in the Liverpool markets, and their growth and strength increases daily. We learn that India, one of our competitors, sent her first trial cargo to Liverpool in 1872. In 1875 she sent 1,500,000 bushels of grain. She kept on increasing yearly until in 1882 she shipped over 37,000,000 bushels of wheat; which increase has continued until last year she shipped 74,000,000 bushels, being three-fourths as much as the United States exported in 1880. Now, I ask in all candor, is not this conclusive that this competition is real, substantial, and permanent?

Supply and demand is the arbitrary rule that fixes prices, not by force of imagination or supposition, but by mathematical calculation. And remember there is no pro

tection, low or high tariff, to aid or assist our honest farmers in finding a market for their surplus products.

But it is said canals are played out, and this age and generation are too progressive; that we have not time to give them thought or consideration; and I fully realize that before you can convince you must be heard, and you cannot be heard without attention. And while I am satisfied that all things have their day and generation, do we not believe in resurrection and reform? And how often do we find reform absolutely necessary in all departments of life, for we have ups and downs in life the same as "puts and calls."

Yes, Mr. Chairman, history tells us that during the latter half of the eighteenth century there was a greater rage for canals than for railroads. In the third quarter of this—the nineteenth—century it was the reverse, and I am of the opinion that the latter part of this century will ever be famous for the canals constructed.

In England and Wales they have 4,332 miles of inland water-ways, of which 2,919 are canals, and the total cost is estimated at $100,000,000.

Russia has 900 miles of canal, which in most instances unite head waters of rivers that have their outlets at opposite extremities of the continent.

Sweden abounds in lakes, which cover 14,000 square miles, with no navigable rivers except those which have been made so by internal improvements and canals. Sweden has nevertheless great internal navigation, her lakes, rivers, and bays being connected by over 300 miles of canals. There is direct water communication between the Baltic Sea and Gothenburg, and the distance from Stockholm to Gothenburg is 470 miles—one 50-mile canal, and the same distance along the Baltic; the balance of 270 miles is through lakes, bays, and rivers, and thus made navigable.

Germany had in 1877 1,250 miles of canals, 70 in number, which are being increased annually.

Holland has 930 miles of canals and 340 miles of river navigation. The North Holand Canal, 52 miles long and 16 feet deep, is the greatest work of its day. It was constructed from 1819 to 1825, at a cost of $4,500,000.

France has the Canal du Mede, which unites the Atlantic with the Mediterranean and Bordeaux with Cette. The celebrated canal of Languedoc was built from 1667 to 1681—two hundred years ago. It is 171 miles in length and 5 feet 3 inches deep. It seems France has 8,120 miles of inland water transportation: by river, 4,997 miles, and canal, 3,123 miles. Actual cost of these canals, $163,690,715; for river improvements, $67,785,152, being a total, up to 1872, of $231,475,867 expended by France for internal improvements; and in the face of this, in 1878 the estimated cost of canals and other internal improvements yet to be completed and constructed $200,000,000 more. Hence it will be seen that France, with a standing army of over 500,000 men, 302 ships of war, and 50,000 marines, at an annual cost of $115,000,000, a public debt of four and three-quarter billions, almost double the amount which our national debt ever was, and a population of only 37,000,000, has expended on her water-ways double what we have. And now, Mr. Chairman, I wish to contrast the action and expenditure of France for cheap water transportation with the United States, for an examination will tell us that our Government has only expended for all kinds of internal improvements since its foundation the small sum of $111,000,000, and out of this sum canals have only had a trifle over $10,000,000.

Mr. Chairman, shall the nations of the Old World teach us the duties of the hour? Are we willing to yield the proud position of leader in the world's proud march of progress to which we have been called by the god of nature?

This nation of ours, administered by the people and for the people, should not rest until our national water-ways that are navigable are made perfect and complete by water connections like this canal.

Yes, this canal is demanded by every reason which should influence statesmen to legislate for the good of the people.

Will any one deny that the industry of our country is paralyzed for the want of money which lies locked up in the Treasury, and if paid out only on Government bonds will not aid or assist the commercial interests of our country or find bread and meat to the poor and needy who are willing to work early and late to keep gaunt want and wretched poverty from darkening their firesides? Yes, Mr. Chairman, we will do our duty, and pay out, I hope, millions of dollars that are now rusting in the Treasury for this and other much needed public works, which action will result in a blessing to our people, whose representatives we are, and thereby warm the firesides and gladden the hearts of thousands of our fellow-citizens by giving them employment and thereby put bread into the mouths of their suffering families.

And in this connection I wish to call the particular attention of this House to a question asked by our friend Blanchard, from Louisiana, and the reply thereto of Hon. J. C. Dore, of Chicago, when before the Committee on Rivers and Harbors at this session of Congress.

Mr. Blanchard said: "Would it not be proper to say, if we were to take one-half of what it costs France, England, or Germany to maintain their standing armies—

such armies as we do not maintain—and put that in improvements, it would accomplish a great deal of good?"

Mr. Dore, answering, said: "Inferentially I am on the same line. The United States has no such burden. It is a common saying that we have no navy, and our Army is little more than sufficient for a national police; and yet, forsooth, with an immense annual surplus of revenue, how many of our legislators will say this great nation of sixty millions of people, and having now fifty billions of dollars of wealth, cannot afford to spend $25,000,000 annually on internal improvements? If we intend to compete with other nations in the markets of the world we must adopt the same means to insure success, if we cannot do better. If we do not, we shall not deserve success, and will continue to be beaten as we are now.

And, gentlemen on this floor, are we ready to yield the proud position of leader in the world's grand march of progress? Are we willing to allow our foreign market to be taken from us and captured by foreign rivals?

Mr. Chairman, I have no interest in this subject, except the interest I take in all things that concern the honor and welfare of my country and its prosperity. We are to have a hard struggle to keep our lead as a food-supplying country, and we must give up the delusion that Europe depends upon us for food, for it will only buy of us if we can deliver at the lowest cost. The delusion that the Old World depends upon us for food stimulates extravagance in Congress and corruption in legislatures. If we fail to uphold our water-routes as protection against unwise and unjust charges for transportation, we will suffer in the future. Yes, Mr. Chairman, it is estimated that the United States can produce to-day enough to supply 100,000,000 of people, while our consumption is for 50,000,000, so that we have a surplus of 100 per cent. What is to be done with this surplus if we cannot compete and find a market abroad? Must it not rot in the storehouse? And in this connection I wish to call your close attention to a vital fact, and upon which rests our future prosperity, and that fact is a self-evident truth. If we have a market where we can take and sell our surplus products we will prosper, but if we have not we will not. To provide a market for our surplus is the question, for, in my judgment, our want in the near future is a market for our products.

To-day our want is supplied by a foreign demand, but who is bold enough to assume that it will continue with the sharp competition of rival nations that are to the front to-day? In that competition we can only hope to be successful by a cheaper transportation to the seaboard. Hence it is that the united producing interests of this country demand with one voice that Congress shall make the necessary appropriations to improve our natual water-ways and construct artificial ones, when they form a connecting link, like the Hennepin Canal, to the end that our prosperity in the past will be enjoyed in the future, for without a market our surplus would be a burden; and remember, you never miss the water till the well runs dry. And, Mr. Chairman, I say how we are to provide, keep, and hold a market for what we have to sell is one of the most important subjects that can command the attention and respect of American statesmanship, for good statesmanship will not only provide for the present, but, if wise, will look into the future. So I may say that the construction of this water-way by the General Government is needed and demanded, and that demand is voiced by the merchants and manufacturers of the East, seconded by the consumers of western products, and echoed back by ten millions of the producers of the Northwest, who have sweat and toiled, early and late, in the useless effort to contend by labor and patient toil against the unjust charges and willful extortions of railroads.

And, Mr. Chairman, in this statement I am but echoing the refined wisdom of that distinguished statesman, President Monroe, who, in his first message to Congress, said (I quote):

"When we consider the vast extent of territory in the United States, the great amount and value of its productions, the connection of its parts, and other circumstances on which their prosperity and happiness depend, we can not fail to entertain a high sense of the advantage to be derived from the facility which may be afforded in the intercourse between them by means of good roads and canals. Never did a country of such vast extent offer equal inducements to improvements of this kind, nor ever were consequences of such magnitude involved in them."

Yes, Mr. Chairman, they are of great magnitude. Now, take this link in water connection—the Hennepin Canal—which connects the Mississippi River and its tributaries and our great inland lakes. Look at the map attentively; study it carefully. The now called Michigan and Mississippi Canal will carry freight from the Mississippi River to Lake Michigan at Chicago, and from thence the lakes will carry it to Buffalo, thence by the Erie Canal and the Hudson River to New York City, and from New York City by water around the world.

And, Mr. Chairman, if a single doubt rests in the mind of any gentleman on this floor I feel confident it will be removed when his attention is called to an article published

in the New York Herald, prepared by that well-known writer on water-ways, Col. Alexander D. Anderson, of New Orleans. He says:

"Of the hundreds of streams which comprise the Mississippi River system forty-three are navigable, and either intersect or border twenty-one of the forty-seven States and Territories.

"These twenty-one States and Territories contain 51 per cent. of the nation's area and 58 per cent. of the population.

"The heads of navigation of the respective rivers are designated by cross-marks on the accompanying diagram.

"The total mileage of the forty-three rivers is 15,640.

"The mileage of navigation attaching to each of the twenty-one States and Territories is approximated as follows:

States.	Miles.	States.	Miles.	States.	Miles.
Arkansas	2,100	Tennessee	1,260	Ohio	550
Missouri	1,870	Kentucky	1,230	Texas	440
Louisiana	1,650	Indiana	840	Nebraska	400
Mississipi	1,380	Iowa	830	West Virginia	390
Montana	1,310	Indian Territory	720	Pennsylvania	380
Dakota	1,280	Minnesota	660	Kansas	240
Illinois	1,270	Wisconsin	560	Alabama	200

PRODUCTS OF STATES INTERSECTED.

"The above-mentioned twenty-one States and Territories, which are either intersected or bordered by the navigable portions of the Mississippi and its tributaries, produced during the last census year 98 per cent. of the sugar, 94 per cent. of the coal, 89 per cent. of the corn, 81 per cent. of the pig-iron, 76 per cent. of the oats, 74 per cent. of the wheat, 68 per cent. of the cotton, 66 per cent. of the tobacco, 60 per cent. of the hay, 57 per cent. of the forest products, 56 per cent. of the wool; and contained 82 per cent. of the swine, 77 per cent. of the mules, 74 per cent. of the horses, and 73 per cent. of the cattle, other than working oxen and milch cows.

"Their total grain product during the last census year was as follows, in bushels:

Indian corn	1,558,358,656
Wheat	342,230,515
Oats	310,271,706
Barley	18,888,089
Rye	13,947,824
Buckwheat	5,082,580
Total	2,248,779,373

"In other words, the States and Territories tapped by the navigable portions of the Mississippi River system produced grain to the extent of 44 bushels for every man, woman, and child, as enumerated in the census of 1880. They are, then, not only the granary of the nation, but of the world."

And, Mr. Chairman, it is with pride as well as pleasure I take this opportunity of saying that our esteemed friend, Colonel Anderson, could not and did not forget to mention this canal improvement, and I now read his concluding statement:

"In addition to this grand showing for the mighty Mississippi, the Michigan and Mississippi Canal, 74½ miles long, will connect this great river water-way system with our inland lakes—over 2,000 more miles of water-way—it will cost the people of the United States only $5,000,000 to build it entire, and it will save to the people in return each year, on freight, not less than $50,000,000. And the Dixon Sun with heart and soul says, let Congress, for the people, build it, and build it promptly!"

Mr. Chairman, I ask in all candor if there ever was a canal constructed by the hand of man upon God's "green earth" that formed a link by its construction, and thus connected navigable waters, that did not prove worthy and meritorious? Hence is it rash to conclude that if you will build this canal its benefits to commerce are guaranteed and certain? Take for example and by way of illustration its twin sister, the Saint Mary's Falls Canal, which connects two great waters of the lakes. It was constructed by a donation of Government land, like many railroads constructed by the same aid, and is to-day a private corporation. And be it said to the honor and manliness of the people of that section they are praying to have Congress make an appropriation and purchase it, so that it will be a free water-route, and then they will not be burdened by its toll charges. That canal was constructed and put in operation in 1855, and the following table will show its increase in transportation in twenty years:

and allow me to say this is no Munchausen dream, for I was furnished this statement by the Civil Engineers Department a few days since:

Tonnage carried through Saint Mary's Falls Canal; registered tonnage used to 1880, *inclusive, freight tonnage since.*

Year.	Tons.	Year.	Tons.	Year.	Tons.
1855	100,000	1866	460,000	1876	1,540,000
1856	100,000	1867	560,000	1877	1,440,000
1857	180,000	1868	440,000	1878	1,660,000
1858	225,000	1869	525,000	1879	1,680,000
1859	350,000	1870	680,000	1880	1,740,000
1860	400,000	1871	750,000	1881	1,560,000
1861	280,000	1872	920,000	1882	2,030,000
1862	360,000	1873	1,200,000	1883	2,260,000
1863	510,000	1874	1,060,000	1884	2,870,000
1864	570,000	1875	1,260,000	1885	3,260,000
1865	420,000				

This tonnage, if oats, would be 203,750,000 bushels; if corn, would be 116,428,571$\frac{4}{7}$ bushels; if wheat, would be 108,666,666$\frac{2}{3}$ bushels.

Mr. Chairman, the report of our Committee on Railways and Canals that I have read in my opening remarks, shows conclusively that no water improvement of any kind, no matter where located, has received the indorsement that this one has. But as the Produce Exchange of New York is one of the largest and oldest commercial bodies of this country, I wish to call particular attention to their action and memorial.

To the Board of Managers of the New York Produce Exchange:

Your committee on trade, to whom has been referred the question of application to Congress for the building of the Hennepin Canal by the United States, have given to this subject the attention demanded by its important bearing on the internal commerce of the country, and respectfully report as follows:

In the opinion of your commitee there can be little, if any, question that the proposed opening of a water-way from the Mississippi River to the Illinois and Michigan Canal and the great lakes promises highly advantageous results not only to the Northwest States, but to the whole northern country east of the Mississippi River. Besides furnishing new means of transport to the Atlantic seaboard for the produce of Iowa, Minnesota, Nebraska, and other grain-producing States, such a canal would also act as a welcome regulator of railroad freights in the Northwest.

There can be little question, also, that neither private enterprise nor the State of Illinois, within whose territory the canal would be situate, nor any other State directly benefited, nor all these combined, will or can undertake an enterprise which is sure to meet the determined opposition of the railroad interest.

The question before us therefore simply is, Shall the United States build and maintain this canal, and can this exchange, in view of the well-grounded opposition to the policy of internal improvements in general, consistently recommend such action on the part of the General Government?

After mature consideration your committee have come to the conclusion that this question should receive an affirmative answer from your board, and for the following reasons:

The ground on which the Hennepin Canal is to be built has been repeatedly surveyed with a view to that improvement by the United States Government and by other competent parties. The practicability of the project has been established and the cost has been reliably ascertained. The scheme therefore cannot be classed with a large number of internal improvements annually brought before Congress, which are indefinite in their scope and in the results expected, and of uncertain cost.

The Hennepin Canal further differs from many of those proposed improvements in so far as it is sure to benefit a very large section of the country, our own State included. The General Government further seems to be committed to an extensive improvement of the Mississippi River, of which the Hennepin Canal may justly be considered part and parcel; and the fact that its construction would inure to the benefit of the Northern States east of the Rocky Mountains only strengthens its claim on the whole country, which for a long time to come is, according to the policy already adopted, to be taxed for the improvement of the Mississippi River in its southerly course. Your committee therefore feel justified in recommending to your board the adoption of the following preamble and resolutions:

Whereas the completion of a water-way from the Mississippi River to Lake Michigan by the construction of the Hennepin Canal promises to realize advantages of national importance; and

Whereas there are insuperable obstacles in the way of having such improvement carried out by private enterprise or by the States immediately benefited; and

Whereas the building of the Hennepin Canal may justly be regarded as part of the improvement of the Mississippi River: Therefore

Resolved, That in the opinion of the New York Produce Exchange the United States should undertake to build the Hennepin Canal and to maintain the same free for all time to come.

And further resolved, That our Senators and Representatives be requested to join the Representatives of other States in providing the necessary legislation for carrying out this plan.

L. F. HOLMAN,
Chairman.
JOHN SINCLAIR.
WALTER CARR.
SAML. S. CARLL.
GUSTAV SCHWAB.

NEW YORK, *December* 19, 1881.

Mr. Chairman, I fear I have committed waste upon your patience, and my only apology is my zeal and earnestness. I have long since been impressed with the importance of this canal project; that impression has grown into a conviction; and in conclusion I thank you most sincerely for your indulgence and beg of members on this floor to vote for this bill, for our Government in the past has shown a genius for improvement aided by many practical ideas, an indomitable industry that has electrified the world. Will she now sit idly by and allow natural commerce, that by right of legitimacy belongs to her, to be lost by inaction? If she does, that monument of honor and glory which proudly stands in this city and was erected by the hand of progress will crumble into dust and return to mother earth that bore it.

[House Ex. Doc., No. 117, Forty-ninth Congress, first session.]

Letter from the Secretary of War, transmitting report from the Chief of Engineers of additional surveys, by Maj. Thomas H. Handbury, of routes for Hennepin Canal.

MARCH 9, 1886.—Referred to the Committee on Railways and Canals and ordered to be printed.

WAR DEPARTMENT,
Washington City, March 8, 1886.

The Secretary of War has the honor to transmit to the House of Representatives a letter of the 6th instant from the Chief of Engineers, and the accompanying copy of a report from Maj. Thomas H. Handbury, Corps of Engineers, giving results of additional surveys of routes for the Hennepin Canal, supplementary to those contained in the report of Maj. W. H. H. Benyaurd, Corps of Engineers, transmitted to Congress with the Annual Report of the Chief of Engineers for 1883.

WM. C. ENDICOTT,
Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., March 6, 1886.

SIR: I have the honor to submit herewith a copy of a report to this office from Maj. T. H. Handbury, Corps of Engineers, giving the results of additional surveys of routes for the Hennepin Canal, supplementary to those contained in the report of Maj. W. H. H. Benyaurd, Corps of Engineers, transmitted to Congress with the Annual Report of this office for the fiscal year ending June 30, 1883.

For convenience of description and comparison, his report divided the canal into two divisions—the eastern, including that portion between the Illinois River and the summit level at the feeder junction, and the western, from thence to the Mississippi. For the western division three lines were surveyed by him, designated as the Marais d'Osier, the Watertown, and the Rock Island routes—the eastern division, from the Illinois River to the summit, a distance of 25 miles, being common to all.

For the reason that all available data bearing upon the choice of the line to be followed by the canal would be of importance to deliberations of Congress upon the subject, and in view of a communication from Mr. Eugene Lewis, of Moline, Ill., advocating the building of a dam in the Mississippi River near the head of Rock Island for the purpose of forming a pool in which to terminate the canal on the Watertown route, Major Benyaurd was, with your approval, directed to collect all additional information from records of surveys already made, and, with a balance of funds applicable to the purpose, to supplement these by such additional surveys as might be deemed advisable. Owing to his absence on account of illness, this duty was assigned to Major Handbury.

The report herewith submitted contains the results of the survey of two additional routes diverging from those terminating at Rock Island and at Watertown already reported upon; viz, a line from a point in Saint Peter's Marsh, where it is crossed by the Marais d'Osier line, to a point on Rock River known as Penney's Slough, and from thence by the most practicable route to the Mississippi near Watertown; and a line from Penney's Slough following down Rock River to near its mouth, and from thence to the Mississippi at about 1½ miles below the city of Rock Island, following from the mouth of Green River to the Mississippi the same ground as in former survey; and also contains revised estimates of the probable cost of the several routes, the totals for construction of canal and feeder, including right of way, being as follows:

Marais d'Osier route, length 64 miles	$5,811,367
Watertown route, via Green River, 65.2 miles	7,207,646
Watertown route, via Penney's Slough, 64.9 miles	6,306,552
Rock Island route, via Green River, 74.5 miles (revised)	6,709,536
Rock Island route, via Penney's Slough and Rock River, 77 miles	6,554,052
The cost of the feeder from Rock River at Dixon (common to all, being included in each of the above estimates)	1,664,117

Referring to the three points which have been designated for the western terminus of the canal on the Mississippi, Major Handbury remarks that at the terminus of the Rock Island route, the first lock of which must be placed near the river bank, a pool or harbor of some kind would have to be provided, where boats arriving could await opportunity to enter the lock. This could be constructed without injury to the navigation of the river.

That on the Watertown route the canal enters the river in the Rock Island Rapids, which extend from Davenport 14 miles, having in this distance a fall of about 1½ feet per mile at low water, and no slackwater of sufficient depth for boats to lie for opportunity to enter the canal. For two-thirds of the season the river is high enough for navigation. To place a dam at any point in the rapids involves the construction of a lock through which every craft, large and small, must pass at all stages of the river, causing serious delay and obstruction during the time of high water, when there is no difficulty in navigating the rapids. In the appendix to this report may be found the opinions of several parties engaged in the navigation of the river, condemning the plan in strong terms as of great injury to commerce.

The report considers that the point selected for the terminus of the Marais d'Osier route is freer from objection, in an engineering point of view, and preferable to the others, for the reason that there is an island immediately in front of the proposed outlet, between which and the shore the channel is sufficiently wide and deep for all purposes of the commerce of the canal, and that, the first lock being 6½ miles from the river, access to it would be easy at all stages, and the canal itself would, in that distance, form a pool or basin of ample size, available for boats waiting to enter it.

Major Handbury also gives preference to this route for the reason, apart from the considerations pointed out in Major Benyaurd's report of 1883, of it being the shortest and cheapest, with less lockage and a better regulated supply of water, that the great bulk of the commerce passing through the canal being, as he assumes, from and for the Northwest, the distance from up-river points to Chicago via the Watertown route would be 21 miles, and via the Rock Island route 40 miles greater. He assumes that the commerce of the Missouri and its tributaries seeking the lakes will take the Illinois route when that improvement is completed. Major Handbury, however, takes no note of the western-bound heavy freight which, from Rock Island as a terminus of the canal, would be sent down-stream for the supply of the numerous towns and cities on the Mississippi banks, a feat not so easily accomplished, owing to the Rock Island Rapids with the terminus at Watertown or near Albany. It should be noted also that Davenport, opposite to Rock Island, is, in some respects, already a railroad center.

With respect to the impediment caused by the rapids at Rock Island, it is highly probable, with the terminus of the canal at either of the three points, it may ultimately become necessary to improve the navigation by the construction of a lateral canal.

I beg leave to suggest that this report and accompanying papers and map be transmitted to the House of Representatives for the information of the Committee on Railways and Canals; and, considering the great importance of the project, and the words of the act—

"That the Secretary of War be, and he is hereby, authorized and directed to survey and locate a canal from a point on the Illinois River at or near the town of Hennepin, by the most practicable and convenient route, to the Mississippi River at or above the city of Rock Island, &c."

I venture to suggest that the Rock Island route be adopted, in view of its offering commercial facilities superior to those of the other routes considered in the reports. In the future, should subsequent experience warrant a change, another outlet on the Mississippi might be adopted.

Mr. Lewis, in a second communication, February 19, 1886, he has made to this office (copy herewith), enlarges upon the advantages of the Watertown route for the purposes of Rock Island Arsenal. The opinion of the Ordnance Department might be obtained, if so desired, as to what extent this route would be of advantage for arsenal purposes, as well as its necessity therefor.

I do not agree with Mr. Lewis that a preference of either outlet would have any sensible effect upon the usefulness of the arsenal.

Very respectfully, your obedient servant,

JOHN NEWTON,
Chief of Engineers,
Brig. and Bvt. Maj. Gen.

Hon. WM. C. ENDICOTT,
Secretary of War.

REPORT OF MAJOR THOMAS H. HANDBURY, CORPS OF ENGINEERS, SUPPLEMENTAL TO REPORT OF MAJOR W. H. H. BENYAURD, CORPS OF ENGINEERS, DATED MARCH 31, 1883.

UNITED STATES ENGINEER OFFICE,
Chicago, Ill., February 10, 1886.

GENERAL: I have the honor to submit the following report, which may properly be considered as supplemental to a report upon the surveys for the most practicable route for a canal from a point on the Illinois River at or near the town of Hennepin to the Mississippi River at or above the city of Rock Island, submitted to you under date of March 31, 1883, by Maj. W. H. H. Benyaurd, Corps of Engineers, U. S. A., and published in the Report of the Chief of Engineers for 1883, page 1754.

A few words in explanation of the circumstance that led to this supplemental work is deemed necessary in order that it may be more fully understood.

The act of Congress approved August 2, 1882, which authorizes this survey for what is known as the Hennepin Canal, states—

"That the Secretary of War be, and is hereby, authorized and directed to survey and locate a canal from a point on the Illinois River at or near the town of Hennepin, by the most practicable route, to the Mississippi River at or above the city of Rock Island, with a branch canal or feeder, &c."

The duty of carrying out the requirements of this section was assigned to Major Benyaurd, who at once organized the necessary parties and set them at work in the field to make the required survey. From his personal knowledge of the country through which the route lay, especially the western portion of it, and after a special reconnaissance, it was his opinion that what is called in his report the Marais d'Osier route was the most practicable and economical, and by a survey and estimate for the canal upon this route he would fully comply with the terms of the act.

If other routes were to be considered, the estimates therefor could be made up from data furnished by surveys already made.

This survey was almost completed when the local interests at Moline, Davenport, and Rock Island were introduced into the question, and the surveys to Watertown and Rock Island were determined upon. The advocates of these lines carried their efforts so far as to demand the abandonment of the Marais d'Osier line. At this time the season for field work was well advanced, but a party was organized, with General Charles A. Gilchrist in charge, with instructions to commence at the feeder junction and survey a line to Rock Island, with a branch from near Colona to Watertown on the Mississippi River. The latter part of this survey was prosecuted under somewhat adverse circumstances. The season being well advanced into winter, cold winds and snow were prevalent; the field work closed December 28.

Had surveys to these points been contemplated from the beginning, it is probable that the routes now to be reported upon would have received consideration at that time.

On account of the ground being covered with snow when the latter part of the line to Rock Island was surveyed, some of the data collected, on which the estimate of cost depends, was more or less uncertain and not as satisfactory as it should have been. The nature of the soil, whether rock or earth, could not always be definitely determined. The dams in Rock River at Milan, which it is proposed in the estimate to raise 3 feet, on the supposition that they were solid structures, being then covered with ice and snow, have since been found to be worthless, and will have to be entirely renewed. Doubtful data of this character made it desirable to revise the estimate for this portion of this route, which has been done.

As the act contemplated only a canal communication between the two rivers, Major Benyaurd did not deem that it was within the province of his duties to take into consideration the improvement of the Mississippi River with a view to reaching any particular locality. The survey lines terminated, as all previous ones had done, at the channel of the Mississippi River.

Under date of June 11, 1885, Mr. Eugene Lewis, an attorney and citizen of Moline, Ill., submitted a communication to the honorable the Secretary of War, inclosing a brief in which he advocated the building of a dam in the Mississippi River near the head of Rock Island, with a view to forming a pool in which to terminate the western end of the canal if built on the Watertown route, and giving reasons why neither of the other two routes should be selected.

In the indorsement of the Chief of Engineers upon this communication, he remarks that—

"As all available data bearing upon the choice of the line to be followed by the canal will be of importance to the deliberations of Congress in legislating upon this matter, it is recommended that Major Benyaurd be authorized to collect such information from records of surveys and observations already made, and to supplement these by such additional surveys and observations, including those pertaining to the determination of the best place for the outlet of the canal on the Mississippi, as may, in his judgment, be necessary."

This recommendation received the approval of the Secretary of War, and Major Benyaurd was instructed accordingly.

A party was at once organized and sent into the field in charge of his assistant, G. A. M. Liljencrantz, who was instructed to survey a line from a point in Saint Peter's Marsh where it is crossed by the Marais d'Osier line to a point on the Rock River known as Penney's Slough, and from thence, by the most practicable route, to the Mississippi River near Watertown; also a line from Penney's Slough, following down Rock River to near its mouth, and from thence to the Mississippi at a point about 1½ miles below the city of Rock Island.

It was thought that these two routes would prove to be as practicable and less costly than those to the same points already reported upon. The crossing of the numerous streams entering Green River from the south, which the former route requires, would be avoided; also, the expensive aqueduct over Rock River on the Watertown route.

From the mouth of Green River to Rock Island the present survey covers essentially the same ground as the former.

From where the present line reaches Rock River to Rock Island the route is essentially the same as that surveyed under the direction of General J. H. Wilson in 1866, with the view to improving Rock River. (See House Ex. Doc. No. 15, Fortieth Congress, first session.)

Mr. Liljencrantz commenced field operations September 24 and returned to this office November 21, 1885. His report, which goes somewhat into the engineering details, is transmitted herewith. His field notes were plotted and estimates made under my supervision, Major Benyaurd having been temporarily relieved of his duties by me in order that he might take advantage of a leave of absence granted him on account of ill health.

The estimate given in this report are made upon the basis that the cost of labor and material, and character and dimensions of canal, and structures and cost of maintenance, &c., are the same as given in the report to which this is supplemental.

The estimate given in the report of March 31, 1883, for the cost of the canal to Rock Island via Green River being, as explained above, unsatisfactory, that portion between the mouth of Green River and the terminus has been revised. The estimates as they now stand are as follows:

MARAIS D'OSIER ROUTE.

(Distance, 64 miles.)

Estimated cost of construction of canal and feeder, including right of way	$5,811,367 50
Estimated cost of maintenance and ordinary repairs, annually	88,600 00
Outfit of dredges, boats, &c.	36,000 00

WATERTOWN ROUTE (VIA GREEN RIVER).

(Distance, 65.2 miles.)

Estimated cost of construction of canal and feeder, including right of way	$7,207,646 88
Estimated cost of maintenance and ordinary repairs, annually	91,245 00
Outfit of dredges, boats, &c.	36,000 00

WATERTOWN ROUTE (VIA PENNEY'S SLOUGH).

(Distance, 64.9 miles.)

Estimated cost of construction of canal and feeder, including right of way	$6,306,555 83
Estimated cost of maintenance and ordinary repairs, annually	90,000 00
Outfit of dredges, boats, &c.	36,000 00

ROCK ISLAND ROUTE (VIA GREEN RIVER) REVISED.

(Distance, 74.5 miles.)

Estimated cost of construction of canal and feeder, including right of way	$6,709,836 60
Estimated cost of maintenance and ordinary repairs, annually	94,820 00
Outfit of dredges, boats, &c.	36,000 00

ROCK ISLAND ROUTE (VIA PENNEY'S SLOUGH AND ROCK RIVER).

(Distance, 77 miles.)

Estimated cost of construction of canal and feeder, including right of way	$6,524,052 61
Estimated cost of maintenance and ordinary repairs, annually	84,000 00
Outfit of dredges, boats, &c.	36,000 00
The length of the feeder from Rock River at Dixon is 37 miles, and its estimated cost, included in the above, is	1,664,117 50

ENLARGEMENT OF THE ILLINOIS AND MICHIGAN CANAL.

Estimated cost of construction	$2,298,919 15
Estimated cost of maintenance and ordinary repairs, annually	50,000 00

There are three points on the Mississippi River that have been mentioned in connection with the western terminus of this canal.

It is proposed to terminate the Rock Island line at a point about 1½ miles below the city of Rock Island. This is the most favorable location that can be found in that vicinity.

The Watertown line terminates just below the foot of Campbell's Island, near Watertown, and about the middle of Rock Island Rapids.

The Marais d'Osier line terminates about 2 miles below Albany, opposite the town of Comanche, and about 14 miles above the head of the rapids.

The selection of a location for the western terminus of this canal is a matter of very great importance, on account of both engineering and commercial considerations, and should not be made without due consideration of all interests to be affected.

At Rock Island the entrance to the canal from the river would not be a difficult matter, provided there was no detention in the operation. It would frequently happen, however, that tows with their boats and barges could not at once enter the canal and get into the basin, by reason of obstructions at the first lock, which is necessarily near the river bank. To lie in the swift current of the river or to tie up to the bank and await their opportunity would be a difficult and expensive operation. A pool or harbor of some kind in the river would have to be provided. This doubtless could be done at reasonable expense without material detriment to the navigation of the river at this point.

The fact that the Watertown line enters the Mississippi in Rock Island Rapids renders it necessary to consider briefly, in this connection, the present and prospective state of the improvement of these rapids. The condition of the river at the point of entrance has of course a very important bearing upon the question of selection.

The reach of the Mississippi River known as Rock Island Rapids extends from Davenport up to Le Claire, a distance of about 14 miles. Its general character before improvement was commenced was that of a succession of pools and ripples or chains. The fall in this distance at low water was 21.5 feet, or about 1.5 feet per mile. The project for improvement, which is now about completed, was presented in 1866. It contemplated making cuts, where necessary, through the various chains, so as to have a depth of 4 feet and a channel width of at least 200 feet of extreme low water.

In reply to a resolution of the House of Representatives, a report dated March 15, 1880, was submitted, giving a brief history of the Rock Island Rapids improvements, with reasons and estimates for increasing the width of channel to 400 feet and depth to 6 feet. (Chief of Engineers' Report, 1880, Part II, page 1537, or House Ex. Doc. 67, Forty-sixth Congress, second session.)

At the time the original project for this improvement was under consideration the plan of using locks and dams for steamboats, chutes for rafts and flat-boats, was fully discussed. It was thought then that at least three dams would be necessary. These would be objectionable, because no craft of any kind, large or small, could pass up-stream without going through the locks. The smallest skiff and largest steamboat would alike be subject to this inconvenience. It will obstruct navigation of the river during the time when no difficulties are experienced on the rapids. For five or six months in the year, or about two-thirds of the navigable season, the river is high enough not to require improvement, and in order to overcome the rapids during a period of about three months we would be substituting an artificial one during the other six. The improvement must not of itself become an obstruction, and no plan should be adopted for improvement to navigation in low water that would be prejudicial to its present state in high water. (See Chief of Engineer's Report, 1867, page 286 *et seq.*)

The plan of improving these rapids by blasting away reefs and dredging a channel to the requisite width and depth has been adopted with satisfactory results. Should the interests of commerce at any future time demand a greater depth of water than can be obtained by these means, an independent canal without dams, such as is in successful operation at the Des Moines Rapids, can be made from the head to the foot of these rapids. In that case none of the work already done need to be sacrificed. So far as I can learn no one has ever yet, in the interests of navigation, seriously proposed improving Rock Island Rapids by any plan in which dams enter as an essential feature. The proposition of Mr. Lewis, in his brief to the Secretary of War, to place a dam across the river near the head of Rock Island, could not be carried out without giving great cause of complaint and doing great damage to the interests of navigation on the Mississippi River.

The benefits that, it is claimed, would accrue to the Government establishment on Rock Island by adopting his plan ought not to have a moment's consideration as against the difficulties and inconveniences it would impose upon the commerce passing up and down the river. There is no doubt but the water-power of Rock Island Arsenal would be greatly increased by this means, as would also be the value of the water franchise now held by the Moline Water-Power Company, located at Moline. In discussing the merits of his proposition, it seems remarkable that Mr. Lewis should have entirely overlooked this latter fact and not even remotely allude to it in his brief.

If the water-power now provided for the Government establishment should be found at any time insufficient for its needs, it should be supplemented by steam rather than that the interests of navigation should suffer.

It has been estimated that provision should be made for at least 2,000 horse-power for Government purposes at Rock Island. It is not to be supposed that anything like this amount will be continuously required. The whole of this, if supplied by steam at $60 per horse-power per annum, would cost but $120,000, a sum very insignificant in comparison to the amount that would be lost to the commerce of the river by reason of the obstruction proposed.

In order to ascertain the views in regard to this proposed dam of those interested in navigation and commerce upon the Mississippi River, I addressed a letter to several firms and individuals, whose interests it was known would be affected, and asked an expression of opinion. Copies of this letter and of the replies received are herewith inclosed. The replies are all very emphatic in their condemnatinn of such a scheme.

It would be exceedingly difficult for a tow with barges to enter the canal without some means having been provided for diminishing the velocity of the current over rapids at this point. There is no suitable slackwater in this vicinity of sufficient depths where boats could lie or tie up to the bank in case of a detention of any kind at the mouth of the canal. To provide for these contingencies by auxiliary works, placed in the bed of the Mississippi River in such a manner as not to interfere with navigation on that river, would be a difficult and expensive operation. The point selected for the entrance of the Marais d'Osier line to the Mississippi River is free from any of the objectionable features alluded to as against the other lines.

A few moments' consideration of the map of this vicinity, forwarded by Major Benyaurd with his report on this subject (Sheet C, from Rock River to the Mississippi on the Marais d'Osier route), will show that at very small cost every condition necessary for such a position to fulfill can be obtained at this point. Nature has so well adapted this locality to the requirements of an outlet of a great canal to a great river that but little is left for engineering science to add. Immediately in front of the outlet there is a large island, between which and the main shore there is a channel sufficiently wide and deep to accommodate all the commerce of the canal. Beyond the island is the main body of the river with its main channel. Just inside the entrance to the canal there is sufficient basin room for every conceivable purpose. The first lock in the canal is at a distance of 6½ miles from its mouth. The access to the canal from the river will be easy at all stages of the water. The channel behind the island and the basin just within the mouth of the canal will always be available for boats lying in wait in this vicinity.

The advocates of the Hennepin Canal attach great importance to the fact that it will benefit the large area of grain-growing country lying in the Northwest.

A few moments' consideration of the map of the United States, west of the Mississippi River, will show the situation so far as water routes of transporatation alone are concerned. The commerce of the Upper Mississippi and its tributaries seeking lake transportation and that of all railroads affected by these must be more or less influenced by this canal; that of the Missouri River and its tributaries, if going to or from the lakes, will take the Illinois River route when the project for its improvement now in process of execution has been completed.

The distance from the mouth of the Illinois River to Chicago via the river and the Illinois and Michigan Canal is 320 miles. The distance between the same points via the Mississippi River to Rock Island, thence by Hennepin Canal and Illinois and Michigan Canal, is about 450 miles. Distance from Rock Island to mouth of Illinois River is 275 miles.

A general idea of the amount of produce of various kinds whose cost of transportation will be more or less affected by the construction of the Hennepin Canal may be obtained from the statistical data furnished herewith.

It is plainly evident that the great Northwest has a greater interest in the construction of this canal than any other section of the country, and that the aggregate of the benefits to it should have the greatest weight in the selection of its western terminus. The great bulk of the commerce passing through the canal, or affected by it, will be going to or from this country.

If the Marais d'Osier route be chosen it will enjoy several advantages that it would not have if obliged to go either to Watertown or Rock Island. The distance from Upper Mississippi River points to Chicago via Wartertown is 21 miles, and via Rock Island 40 miles, greater than on the Marais d'Osier route. The difference of level to be overcome by lockage is 14 feet over Watertown and 26 feet over Rock Island, more than by the Marais d'Osier.

Notwithstanding that the Rock Island Rapids may be improved so as to afford reasonably safe navigation over them, they will always be a source of additional expense, in the shape of higher rates for freights and higher insurance, to the commerce having to pass them. All this is in favor of the Marais d'Osier route and against both the others.

The local commerce of Rock Island, Moline, Davenport, and vicinity to be affected by this canal will be very small in comparison to that of the Northwest. It is better that this should be transported the additional 18 miles that it would be subjected to by the Marais d'Osier route than that the large commerce of the Northwest should have to pay the extra charges incident to the additional 21 miles with a fall and rise of 14 feet by the Watertown route, or the 40 miles with a fall and rise of 26 feet by the Rock Island route.

It is not probable that any large amount of commerce from below Rock Island will seek the Hennepin Canal route after the Illinois River has been improved as projected, and a canal is constructed continuing this improved water-way to Lake Michigan.

The object had in view in the construction of the Hennepin Canal is to provide a commodious water communication from the Mississippi River to Lake Michigan for the purpose of cheapening the cost of transporting the commerce pertaining to a large area of our country. As a matter of interest bearing upon this subject, I will briefly allude to three other projects, two of which are now in the process of execution, that have been put forward for the accomplishment of the same object. These are the improvement of the Fox and Wisconsin rivers; the improvement of the Rock River, Illinois and Wisconsin, and the Fox River, Wisconsin, connecting by slackwater and canal the Mississippi River and Green Bay, and the improvement of the Illinois River and enlargement of the Illinois and Michigan Canal.

The first mentioned of these improvements has been in progress for some years. The adopted project contemplates a low-water channel 100 feet wide and 6 feet deep,

to be attained in the Fox River by locks and dams with a canal at the portage, and on the Wisconsin River by concentrating the water by means of wing-dams of brush and stone so that by the scour due to the increased current the requisite depth may be obtained. The distance from Prairie du Chien on the Mississippi at the mouth of the Wisconsin to the mouth of the Fox River on Green Bay is 265 miles.

The present status of this work and the merits of the route as a line of transportation are set forth and discussed at considerable length in a report of the Board of Engineers for Fortifications and River and Harbor Improvements, dated January 5, 1884, and letters that accompany the same, all to be found in the Report of the Chief of Engineers for 1884, Part III, page 1900 *et seq.*

A survey of Rock River, Illinois and Wisconsin, was provided for by act of Congress approved June 23, 1866. The report with plans and estimates of cost necessary to make this route available for commerce was submitted and is published as House Ex. Doc. No. 15, Fortieth Congress, first session. The survey commenced at Fond du Lac, Wis., and ended at Rock Island, Ill. The project for improvement contemplates providing slackwater navigation along Rock River by means of twenty-two dams and locks, covering a distance of 167.5 miles; navigation over the remaining distance, 117.5 miles, is to be provided for by the construction of an independent canal and locks. From Fond du Lac to Green Bay the route follows the line of Lake Winnebago and Lower Fox River. The improvement of this portion was not estimated for in this project. The locks recommended for the Rock River improvement were fixed at a length of 200 feet between miter-sills with a width of 30 feet. The width of the independent canal was fixed at 85 feet on the water surface in deep cutting, and 93 feet in shallow cutting. The depth of water throughout the entire system was to be not less than 7 feet. The entire cost of improving these 285 miles was estimated to be $14,738.370.

Plans were submitted for a smaller canal and slackwater, giving a depth of 5 feet only, and estimated to cost $5,252,000. The distance from the Mississippi River to Green Bay by this route is about 350 miles. This project has not yet received the sanction of Congress by any appropriation for its commencement.

The project that is now being carried out for the improvement of the Illinois River contemplates obtaining a navigable depth in the channel at low water of 7 feet from its mouth to La Salle, a distance of 223 miles. This is to be accomplished by means of a system of locks and dams, with some dredging at certain points in the channel. The locks are four in number, 350 feet between miter-sills and 75 feet wide, sufficiently large to admit of the passage of the large steamers that navigate the Mississippi River, and also of gunboats or other naval vessels that the probable exigencies of a war at some future time may make it necessary to transfer from the Gulf of Mexico to the Lakes. The State of Illinois, with some assistance from Congress, has in conformity to this project completed two locks and dams, one at Copperas Creek, the other at Henry, improving the river by this means from La Salle to Copperas Creek, a distance of 88 miles. The United States Government has undertaken to improve the remaining 135 miles to the mouth of the river. Two locks and dams are in the process of construction on this reach, one at La Grange, the other at Kampsville. It is estimated that $700,000 will be required to complete this project. When this is done there will be navigable water at all seasons of the year from the Gulf of Mexico to within 100 miles of Lake Michigan for large vessels engaged either in commercial, military, or naval operations. This work is a part of a project entered upon by United States and the State of Illinois for the purpose of providing uninterrupted water communication between the Lakes and the Mississippi River, of sufficient capacity to meet the wants above mentioned.

A survey was made and plans and estimates submitted for this project, in accordance with the requirements of the river and harbor act approved March 2, 1867. The report of the Board of Engineers designated for this purpose may be found in the Chief of Engineers' Report for 1868, page 438 *et seq.* The project of this Board contemplated that the Illinois River should be improved from its mouth to Joliet, and the Illinois and Michigan Canal enlarged from thence to Chicago. Its estimate for this enlargement was $13,344,720. For improving the Illinois River from La Salle to Joliet, Major Benyaurd estimates the cost will be $3,433,562, for locks with chambers 350 feet long and 75 feet wide, and for locks the size adopted for the Hennepin Canal, 170 feet by 30 feet, $1,975,446. His estimate for enlarging the canal from Chicago to La Salle to the size proposed for the Hennepin is $2,298,919. The Illinois and Michigan Canal is 96 miles in length. Its locks are 110 feet long and 18 feet wide, with 6 feet depth of water on the miter-sills.

It appears that both the State of Illinois and the United States are engaged upon the same project for improving the Illinois River, and opening a navigable passage to Lake Michigan for vessels drawing 7 feet of water. Just what part or how much of the project is to be executed by each of the governments does not appear to be clearly defined. Whether any definite arrangement has been made or understanding arrived at I am unable to say.

That there should be a water-way such as is contemplated by this project for the purposes named, that will connect the waters of the Great Lakes with those of the Gulf of Mexico, there can be no doubt.

By act of the legislature of the State of Illinois, approved April 28, 1882, ratified by the people November 5, 1882, the Illinois and Michigan Canal was ceded to the United States under condition of acceptance by Congress within five years from the time the act takes effect, and subsequent enlargement. No mention is made in the act of that reach of the Illinois River between La Salle and Copperas Creek controlled by the State and on which the State collects tolls. The upper end of this canal is located in the Chicago River, about 5 miles from its month. This river passes through the heart of Chicago and is crossed by numerous bridges that are thronged almost every hour of the day and night with vehicles and people. The river and these bridges are now entirely under municipal control.

Before taking steps looking to the enlargement of the Illinois and Michigan Canal in the interests of commerce, or as a military expedient, the advisability is suggested of ascertaining whether or not some route can be found from Joliet to Lake Michigan at a point where better facilities can be provided for handling the large commerce of this section. It is thought by some that a practical route exists between the valley of the Des Plaines and Calumet rivers, along which a canal such as will accommodate the largest vessels using the improved Illinois River can be constructed at a cost less than that estimated for the enlargement of the Illinois and Michigan Cnnal from Joliet to Chicago.

Before the benefits claimed for the Hennepin Canal can be fully realized to commerce, some one of the projects above outlined for continuing the improvement of the lake must be carried forward to completion.

Very respectfully, your obedient servant,

THOS. H. HANDBURY,
Major, Corps of Engineers.

Brig. Gen. JOHN NEWTON,
Chief of Engineers, U. S. A.

REPORT OF MR. G. A. M. LILJENCRANTZ, ASSISTANT ENGINEER.

UNITED STATES ENGINEER OFFICE,
Chicago, Ill., February 9, 1886.

MAJOR: I have the honor to submit herewith a report on surveys for the Hennepin Canal routes, made under instructions from Major W. H. H. Benyaurd, Corps of Engineers, U. S. A., in letter dated September 21, 1885.

The substance of said instructions was to find the shortest and most favorable route from a point just south of Green River on the Marais d'Osier line (surveyed in 1882), at Saint Peter's Marsh, to Rock River at Penney's Slough, and thence via that river to Rock Island, considering also the feasibility of finding an elevation of the river from which a line could be run overland to Watertown.

A line from Saint Peter's Marsh was surveyed for some distance westward for the Marais d'Osier line in 1882, but was abandoned, and a more northerly course substituted. The field notes of this line being available and its direction practically the one desired for the new route, it was not deemed necessary to rerun this part, but a connection was made with it at One Hundred Acre Slough—about 4½ miles from the Marais d'Osier line, about 6 miles north of Atkinson—at which point this survey commenced on the 24th of September, 1885.

A careful examination of the country west of One Hundred Acre Slough revealed only one feasible place for descending to the Rock River bottom, viz, at a ravine (in section 14, Phœnix township) formed by the drainage water from the Pink Prairie region. It was therefore aimed to reach this point by the most direct route

The divide between One Hundred Acre Slough and Big Slough is covered to a great extent by high sand-hills. South of these hills was found low and level ground, but which, if selected, would have made the line to the above-mentioned ravine longer than by the one surveyed. A northwesterly course was therefore taken to the only depression found in the high ridge, and thence into Big Slough, which is crossed in a westerly course. Leaving this slough and crossing another divide, the line traverses Pink Prairie, and reaches the ravine, where a descent is made to Rock River bottom, and thence turning slightly to the left, runs direct, via Penney's Slough to Rock River. On the whole of this distance, about 13 miles, the line does not cross a single railroad and no river or water-course of any importance, save Big Slough.

It was thought desirable to leave Rock River, if possible, where it turns southward below Cleveland, for a short and direct line to Watertown. The intervening land was examined and found favorable, but the water-surface so much below that of

Mississippi high water as to require a dam of such height that the surrounding low country would be flooded for miles. A more favorable stage of the river was found near Penney's Slough, where the raising of low water 5 feet will bring it above high water in the Mississippi at Watertown, and at the same time give the canal a convenient grade with regard to the country traversed all along the line to that place. In response to a report on these facts, I was instructed by telegram and letter from Major Benyaurd, dated October 20, 1885, to survey an overland route from Rock River below Penney's Slough to the Mississippi River at Watertown. A line was found along even and desirable ground with favorable elevation, and in a westerly and very direct course throughout. The route of 1882 reached the river about one-half mile above the foot of Campbell's Island, whence it passed through the shallow and rock-bottom channel between that island and mainland to the main river channel, a distance of nearly a mile. Reaching this point and finding the ground down along the river practically level, a line was run to a point below the foot of the island, where deeper water and a much shorter distance to the main channel was found, indicating a reduction in the very expensive rock excavation necessary in the other route. Soundings were taken in the river opposite the lower terminus which indicate uneven rocky bottom with occasionally quite deep water. A third line was also run to a point 1 mile still farther down the river, in pursuance to instructions from Major Benyaurd in letter dated November 5. This line leaves the first one about 2 miles east of Watertown and goes through a wet and level country to the river, as mentioned above. To reach the alleged deep-water channel in this vicinity, however, the line would cross three parallel railroad tracks twice, or necessitate the change in location of these tracks. Moreover, the river bank consists at this place of rock reaching from 6 to 8 feet above low-water surface, and the length of the canal would be needlessly prolonged, for which reasons this line has not been considered in the estimates. Its location is shown on the detailed map.

The Rock Island line is identical with the one just described to about 1½ miles below Penney's Slough, on Rock River. Thence it follows that river to about a mile below Milan, and farther in northerly direction to the terminus of the route of 1882 at Rock Island.

From the mouth of Green River to Rock Island the line is practically the same as that surveyed in 1882, but all previous surveys having followed the left, more accessible bank, a point was made of following the right bank whenever practicable, to ascertain its character. Soundings were taken on lines across the river between stations established about 500 feet apart from Penney's Slough to Milan. This work could not be done in 1882 owing to ice in the river.

THE WATERTOWN ROUTE.

As previously stated, this year's survey began at One Hundred Acre Slough (on the thirty-ninth mile of the located line), but estimates have been based on the survey of 1882 from Saint Peter's Marsh (on the thirty-fifth mile). Following for many miles a lower level than that of the Marais d'Osier line, going northward, it was found expedient to lower the grade 2 feet, which affects the amount of excavation back to Lock No. 27 (on the thirty-second mile) and causes a change in the lift of this lock from 7 to 9 feet. This change has been duly considered in the estimate. Maps and profiles have also been made to include the portion of the line thus altered. From Lock 27 the canal will be level to where it descends to the Rock River bottom, a distance of over 16 miles. Most of this stretch passes through low, wet, and comparatively inexpensive ground. The Green River, crossing at the thirty-eigth mile, demands special provisions for the high-water season. Its location being at a place where all the flood waters from the river and the extensive marsh above must pass through a space contracted between two sand-hills, an aqueduct has been estimated for of extra strength and 800 feet long, with abundance of siphon-shaped culverts, and with inlet and outlet weirs to afford sufficient passage, above as well as below, for the high water at any stage. A broad trench has been provided for through a ridge on the thirty-sixth mile, as an outlet for the high water from the portion of Saint Peter's Marsh and watersheds south of the canal, and a ditch to drain that territory during ordinary stages of water, thereby also saving the expense and inconvenience of several culverts.

The divide between One Hundred Acre Slough and Big Slough, on forty-third and forty-fourth miles, consists partly of sandy soil, and concrete lining has there been provided for.

In each of the two sloughs just mentioned series of large culverts have been contemplated. Concrete lining will be used in the divide between Big Slough and Pink Prairie.

In the forty-eighth mile the line drops down to Rock River bottom, making a total change in the elevation of 40 feet. The descent of the first 30 feet is quite abrupt, and here it is proposed to construct a lock of three flights, with 10 feet-lift to each. About 3,000 feet farther on, another descent of 10 feet will be made through Lock No. 31.

The principal difficulty at these locks is the question of water supply, on account of the great amount required for lockage at this one point and its great distance from the feeder. To remedy this and provide for possible emergencies a reservoir of ample capacity has been estimated for, which is calculated to be supplied by all drainage water from Pink Prairie, by lockages which would otherwise be wasted, and, at times of a slack in navigation, through sluices from the canal. It is not expected that aid from this basin will have to be resorted to except in cases of extra heavy draught from the canal above.

From below Lock 31, on the forty-ninth mile, the same grade is retained to Watertown, a distance of 15¼ miles.

Penney's Slough is reached at the end of the fiftieth mile. The reach from Lock 31 to this place may be dredged. The ground is low and wet the greater part of the way. This so-called slough is in fact a lake about 2 miles long, averages 400 to 500 feet in width, and is deep enough to furnish a channel 7 feet or more in depth without dredging when the dam at Rock River crossing is made. From the mouth of Penney's Slough the line goes down Rock River a distance of about 6,000 feet, when it leaves the river above a dam 800 feet long, which raises the low-water level a height of 5½ feet and enters the right bank. A guard-lock is here provided for to keep high water out of the canal.

On the fifty-fifth mile the Sterling Branch of the Chicago, Burlington and Quincy Railroad is crossed and its grade raised 4½ feet. From the fifty-fifth to the sixtieth mile the line passes through low, level, and generally wet ground, requiring but a moderate amount of earthwork.

The greater portion of the fifty-sixth mile passes through Barstow's Slough, which drains an extensive area of land from the northeast and has an outlet into Rock River near Barstow Railway Station. A series of culverts is here estimated for.

According to statements from old residents, about 12 square miles of country between Penney's Slough and above-named railway station are flooded annually during the season of high water in Rock River. The portion of land lying north of the canal will have the space between the river entrance at the guard-lock and the bluff on the opposite shore as the only outlet for the high water, save the culverts in the large slough already mentioned. This contracted outlet will undoubtedly cause more or less of a rise of the high water and also prolong its duration to some extent on that account. The banks are made to reach above high-water level as far as to the sixtieth mile, where a comparatively heavy cut is made through a ridge, dividing the slopes towards Rock and Mississippi rivers, respectively.

On the sixty-fourth mile there is a drop in the grade of 6 feet, by Lock No. 32, at the main road to Watertown. A short distance beyond this lock the canal crosses the Racine Branch of the Chicago, Milwaukee and Saint Paul Railroad, the grade of which will have to be raised 2½ feet. On the sixty-fifth mile the final descent is made of 13 6 feet, through Lock No. 33, to 7 feet below low water in Mississippi River. Above this lock a basin, with an area of 9 acres, is provided for, with guard-gates to separate it from the canal when required.

The estimated cost of this line is about $900,000 less than the route to this place via Green River. The principal reasons for this difference are the following:

(1) The general elevation of the ground on this route being more favorable, the cost of earthwork is not as great.

(2) The very few water-courses of any importance to be crossed, as compared with the many tributaries to Green River, reduces the expense of culverts considerably.

(3) This line crosses only two railroads, whereas the other crosses four.

(4) The aqueduct over Green River, near Saint Peter's Marsh, is more expensive than the one proposed for the Marais d'Osier line, owing to the unfavorable circumstances there existing with regard to high water; but the far more expensive aqueducts over Green and Rock rivers, near Colona, are entirely dispensed with.

(5) Most of the route passing through more or less saturated soil, and generally sufficiently far below the natural ground, comparatively little concrete lining is required.

(6) Hardly anything but inexpensive land is embraced in the right of way.

And finally,

(7) The much shorter channel to be excavated through rock in Mississippi River, at Watertown, is a saving of about $150,000.

THE ROCK ISLAND ROUTE.

The route to Rock Island via Penney's Slough is identical with that to Watertown to and including the fifty-second mile. The dam on the fifty-third mile will also be identical with that proposed for the Watertown route. A lock with 4 feet lift will be required here for this line. The fact that the river is comparatively shallow, and either one or both banks and adjacent country low, the greater part of the river down, prevents the sufficient raising of the water-level called for by the former circumstance

on account of the extensive overflow which would necessarily occur wherever the latter circumstance exists. This necessitates lower lifts, and accordingly increase in number of locks from what would otherwise be required, and also a certain amount of dredging, which with a higher water-surface would be needless.

At Cleveland, on the fifty-ninth mile, the low-water level is raised 4 feet by a dam at Lock No. 33. The banks and part of the adjacent ground in this vicinity are quite low and some land will be overflowed, which is provided for in the estimate for special damages. Rock excavation will also be required at this place. Lock No. 34 is located about a mile below the mouth of Green River, with a dam raising the water-level 6 feet. This will overflow a tract of land mostly marshy and inexpensive, but estimated for in cost for damages. The lower level reachd by this lock is retained to Rock Island, and is identical with that adopted for the route of 1882 for the same stretch.

At Milan new dams are estimated for across the different channels of the river, raising low water 3 feet. An examination of the existing dams at this place proved them entirely unfit as foundations for new superstructures. They are even now broken through in several places. The Sears Canal, which has not been in use for several years, and the lock of which is decayed and fallen to pieces, should be taken possession of and its channel made use of. A guard-lock is proposed in the bed of this old canal, and below this the line turns a rather sharp curve to the right, crosses a cornfield for a short distance, and then follows the right bank of Rock River to near its mouth. A heavy side cutting will be made here, which will be utilized in forming the high bank on the river side. This bank will reach above Mississippi high water. Heavy riprapping and concrete lining are estimated for along this bank. No indications of rock were observed in the bluffs along the river. Should any be found, it can be utilized to great advantage for the large amount of riprap and concrete needed at this very place, and would therefore not unfavorably affect the estimate, in which no rock excavation has been considered.

Shortly after the line leaves Rock River, turning northward at the seventy-sixth mile, it enters an extensive swamp, and a basin of 80 acres area has here been provided for. This swamp, were it not for its proximity to Rock Island, would be practically valueless. To the left is a ridge dividing the swamp from Mississippi River, and this ridge forms partly the left bank of the basin. The grade of the canal being slightly above the general surface-level of the swamp, the cost of forming the basin consists simply in the construction of the banks, and for that reason the area of the same may be readily enlarged at a comparatively slight cost, should occasion require, as the swamp extends northward and eastward far beyond the space embraced in the projected basin.

At the end of the seventy-seventh mile the canal on leaving the basin reaches the Mississippi River through a lock with a 17-foot lift at approximately the terminus of the route of 1882. Though this lift may appear undesirably high, it is just as practicable as a two-flight lock, and decidedly cheaper, as the great fluctuation in Mississippi requires equally high gates at the lower end (and walls of corresponding height) in either case, and there is no occasion for economy of water, as Rock River, at only a short distance away, furnishes an abundant supply at all seasons. The line reaches the main channel of the river at a short distance from shore.

BASIS FOR ESTIMATES.

In accordance with instructions, I have made the estimates on the same general basis, with regard to character of structures and prices, as that followed in 1882. Detailed references to the various structures, as culverts, weirs, aqueducts, bridges, &c., made in the report of 1882, are consequently in the main equally applicable to those considered in this instance, and therefore not repeated here.

MAPS AND ESTIMATES OF COST.

An index-map (scale, 1 inch = 2 miles) has been made from that of 1882, showing both the lines then surveyed and those herewith reported on, with profiles of all the different routes.

Seven detail maps have been made to the same scale as those of 1882 (1 inch = 400 feet), showing the located routes and their profiles. These are marked in continuation of the maps of 1882, as follows:

Sheet I.—From Lock 27, on the Marais d'Osier line, to One Hundred Acre Slough.
Sheet J.—From One Hundred Acre Slough to Penney's Slough.
Sheet K.—From Penney's Slough to the fifty-ninth mile.
Sheet L.—From the fifty-ninth mile to Mississippi, at Watertown.
Sheet M.—From Penney's Slough to 1 mile below Cleveland (along Rock River).
Sheet N.—From 1 mile below Cleveland to near the sixty-ninth mile.
Sheet O.—From the sixty-ninth mile to Mississippi River at Rock Island.

Tabular statements of the estimated cost of construction, in mile sections, of the two routes via Penney's Slough, and a revised estimate of the route via Green River to Rock Island, are submitted herewith, besides the following table, showing comparative estimates of the cost of all the different routes:

Comparative estimate of the cost of the different routes.

Subject of expenditures.	Marais d'Osier.	Watertown—		Rock Island—	
		Via Green River.	Via Penney's Slough.	Via Green River (revised).	Via Penney's Slough and Rock River.
Earthwork	$1,024,808 75	$1,142,367 95	$1,040,101 31	$1,034,198 15	$953,106 78
Lift-locks	1,393,350 50	1,435,690 23	1,448,180 00	1,590,270 00	1,627,005 25
Culverts	184,262 03	318,021 09	209,518 83	319,690 79	175,108 48
Weirs	89,964 15	46,109 20	65,829 25	108,165 10	66,646 95
Bridges, railroad	35,942 54	57,851 54	28,279 54	68,919 54	19,479 54
Bridges, highway	150,497 75	167,160 25	149,791 65	161,760 25	122,681 65
Aqueducts	391,212 81	736,713 39	470,411 39	327,339 39	470,411 39
Concrete	133,056 00	376,992 00	155,232 00	379,310 00	201,902 00
Right of way	134,050 00	132,820 00	116,570 00	142,520 00	125,550 00
Fencing	37,600 00	37,142 00	37,284 00	37,300 00	31,205 00
Special work	190,482 72	588,704 50	499,197 77	417,544 13	625,025 77
Total	3,770,227 25	5,039,572 15	4,220,395 74	4,587,017 35	4,418,122 81
Contingencies, 10 per cent	377,022 73	503,957 21	422,039 57	458,701 73	441,812 28
Aggregate	4,147,249 98	5,543,529 36	4,642,435 31	5,045,719 08	4,859,935 09
Feeder branch	1,664,117 52	1,664,117 52	1,664,117 52	1,664,117 52	1,664,117 52
Total	5,811,367 50	7,207,646 88	6,306,552 83	6,709,836 60	6,524,052 61

Estimate for cost of construction of the Hennepin Canal.

MAIN LINE TO WATERTOWN VIA PENNEY'S SLOUGH.

Miles from Illinois River.	Earthwork.			Lift-locks.			Culverts.	Weirs.	Bridges.		Aqueducts.	Concrete lining.	Right-of-way and special damages.	Fencing.	Special work.	Total.
	Cubic yards.	Price per yard.	Cost.	No. of lock.	Lift in feet.	Cost.			Highway.	Railroad.						
		Cents.		/												
31[1]			$561,837 75			$1,129,126 50	$126,852 98	$34,065 30	$78,275 25	$11,979 54	$299,211 39	$133,056	$73,090	$17,440	$64,303 13	$2,529,237 84
32	76,137.8	20	15,227 56	27	9	43,477 75	3,028 80		1,668 00				440	640		64,482 11
33	62,638.0	20	12,527 60										220	640		13,387 60
34	55,126.8	20	11,025 36										220	640		11,885 36
35	64,405.1	20	12,901 02										440	640	[2]656 74	14,637 76
36	59,169.2	20	11,833 84										660	640	[2]2,550 50	15,684 44
37	56,545.7	20	11,309 14						3,650 00				1,600	625	[3]4,058 30	21,242 44
38[4]	57,146.3	20	11,429 26					26,500 00			171,200 00		440	640		210,209 26
39	79,404.7	20	15,880 94				1,655 50						440	640		18,616 44
40	79,042.4	20	15,808 48						6,150 00				2,440	640		25,038 48
41	50,946.6	20	10,183 32				6,312 00						660	640		17,795 32
42	47,936.8	20	9,587 36				3,287 80						660	640		14,175 16
43	93,709.5	20	18,741 90				3,311 00					11,088	3,880	640		37,660 90
44	101,064.4	20	20,212 88						3,650 00				3,320	640		27,822 83
45	77,695.9	20	15,539 18				17,887 40	1,754 65	6,150 00				1,220	640		43,191 23
46	79,759.9	20	15,951 98				4,772 35		3,850 00			11,088	880	640		37,182 33
47	66,664.9	20	13,332 98				2,845 65						2,160	640		18,978 63
48	98,536.5		19,707 30	28, 29, 30	10 each.	133,740 75			1,788 40				1,880	640	[5]15,150 00	172,906 45
49	22,649.2 / 89,898.0	20 / 15	4,529 84 / 13,484 70	31	10	44,580 25			3,650 00				440	640		67,324 79
50[6]	96,776.3	15	14,516 44						3,650 00				440	640		19,246 44
51													1,440			1,440 00
52													2,000			2,000 00
53	28,568.8	20	5,713 76					1,754 65	920 00				2,740	145	[7]6,675 00 / [8]39,950 00 / [9]64,000 00	121,898 41
54	96,294.6	20	19,258 92										880	640		20,778 92
55	75,421.2	20	15,084 24						5,210 00	8,150 00			2,940	640		32,024 24
56	72,035.9	20	16,407 18				26,831 00	1,754 65	5,230 00				220	640		51,082 83
57	80,383.3	20	16,076 66										220	640		16,936 66
58	79,387.7	20	15,877 54						5,200 00				440	640		22,157 54
59	87,124.9	20	17,424 98				4,651 00		3,650 00				660	640		27,025 98
60	60,777.2	20	13,955 44				1,655 50		3,950 00				880	640		21,080 94
61	135,839.0	20	27,167 80				1,655 50		7,300 00				880	640		37,643 30

[1]Saint Peter's Marsh.
[2]Drainage-ditch.
[3]High-water outlet.
[4]Green River.
[5]Reservoir.
[6]Penney's Slough.
[7]Riprap.
[8]Guard-lock.
[9]Dam Rock River.

Estimate for cost of construction of the Hennepin Canal—Continued.

MAIN LINE TO WATERTOWN VIA PENNEY'S SLOUGH—Continued.

Miles from Illinois River.	Earthwork.			Lift locks.			Culverts.	Weirs.	Bridges.		Aqueducts.	Concrete lining.	Right-of-way and special damages.	Fencing.	Special work.	Total.
	Cubic yards.	Price per yard.	Cost.	No. of lock.	Lift in feet.	Cost.			Highway.	Railroad.						
		Cents.														
62	105,167.5	20	$21,033 50	.....	.....	.....	.....	.....	$3,650 00	.....	.....	.....	$,880	$640	.....	$26,203 50
63	84,495.4	20	16,899 08	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,100	640	.....	20,639 08
64	60,807.6	20	12,161 52	32	6	$42,730 00	$4,772 35	.....	1,100 00	$1,150 00	.....	.....	2,100	640	.....	71,653 87
65	37,359.3	20	7,471 86	33	13.6	54,524 75	.....	.....	1,100 00	.....	.....	.....	1,660	514	[10]$4,275 00 [11]18,610 00 [12]278,969 00	367,124 61
	.....	.....	1,040,101.31	....	.....	1,448,180 00	209,518 83	65,829 25	149,791 65	28,279 54	$470,411 39	$155,232	116,570	37,284	499,197 77	4,220,395 74
Add 10 per cent. for contingencies																422,039 57
Total																4,642,435 31

[10] Guard-gates. [11] Basin. [12] Rock excavations.

MAIN LINE TO ROCK ISLAND VIA PENNEY'S SLOUGH AND ROCK RIVER.

52	.....	.....	$835,568 83	.....	.....	$1,350,925 25	$169,953 48	$62,319 95	$112,481 65	$11,979 54	$470,411 39	$155,232	$98,970	$29,585	$86,718 77	$3,384,145 86
53	.....	.....	.....	32	4	62,300 00	.....	.....	.....	.....	.....	.....	.....	.....	[13]63,700 00	126,000 00
54	28,368.8	50	14,184 40	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,184 40
55	22,147.0	50	11,073 50	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,073 50
56	16,962.2	50	8,481 10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8,401 10
57	8,295.9	50	4,147 95	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4,147 95
58	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,000	.....	.....	1,000 00
59	.....	.....	.....	33	4	64,200 00	.....	.....	.....	.....	.....	.....	.....	.....	[2]28,888 00 [13]62,400 00	155,488 00
60	4,148.0	50	2,074 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[2]54,219 00	56,293 00
61	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,000	.....	.....	1,000 00
63	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,100	.....	.....	2,100 00
64	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,100	.....	.....	1,100 00
65[3]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,000	.....	.....	6,000 00
66	8,073.6	50	4,036 80	34	6	64,580 00	.....	.....	.....	.....	.....	.....	1,000	.....	[13]82,500 00	152,116 80
67	20,433.4	50	10,216 70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10,216 70
68	21,628.4	50	10,814 20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10,814 20
72	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	300	.....	.....	300 00

73													1,000				1,000 00
74													2,000				2,000 00
75[4]	94,378.0	20	18,875 60				1,655 00	4,327 00	6,000 00	7,500 00		20,000	10,200	400	[5]32,050 00 [1]155,000 00 [6]12,000 00		268,007 60
76	115,744.0	20	23,148 80				3,500 00					26,670	880	400	[6]31,680 00		86,278 80
77	52,424.5	20	10,484 90	35	17	85,000 00			4,200 00					820	[7]4,000 00 [8]11,870 00		116,374 90
			953,106 78			1,627,005 25	175,108 48	66,646 95	122,681 65	19,479 54	470,411 39	201,902	125,550	31,205	625,025 77		4,418,122 81
Add 10 per cent. for contingencies, &c																	441,812 28
Total																	4,859,935 09

[1] Dam Rock River. [2] Rock excavation. [3] Green River. [4] Milan. [5] Guard-lock. [6] Riprap. [7] Guard-gates. [8] Basin, including cost of right of way.

MAIN LINE TO ROCK ISLAND VIA GREEN RIVER—REVISED FROM THE SIXTY-SECOND MILE.

62[1]			$956,621 15			$1,440,690 00	$314,535 79	$103,838 10	$151,560 25	$61,419 54	$327,339 39	$332,640	$121,140	$35,680	$88,444 13		$3,933,903 35
63													6,000				6,000 00
64	8,073.6	50	4,036 80	34	6	64,580 00							1,000		[2]82,500 00		152,116 80
65	20,433.4	50	10,216 70														10,216 70
66	21,628.4	50	10,814 20														10,814 20
69													300				300 00
70													1,000				1,000 00
71													2,000				2,000 00
72[3]	94,378.0	20	18,875 60				1,655 00	4,327 00	6,000 00	7,500		20,000	10,200	400	[4]32,050 00 [2]155,000 00 [5]12,000 00		268,007 60
73	95,044.0	20	19,008 80				3,500 00					26,670	440	400	[5]31,680 00		81,698 80
74	52,424.5	20	10,484 90										440	400			11,324 90
75	20,700.0	20	4,140 00	35	17	85,000 00			4,200 00					420	[6]4,000 00 [7]11,870 00		109,630 00
			1,034,198 15			1,590,270 00	319,690 79	108,165 10	161,760 25	68,919 54	327,339 39	379,310	142,520	37,300	417,544 13		4,587,017 35
Add 10 per cent. for contingencies, &c																	458,701 73
Total																	5,045,719 08

[1] Mouth of Green River. [2] Dam Rock River. [3] Milan. [4] Guard-lock. [5] Riprap. [6] Guard-gates. [7] Basin, including cost of right of way.

No directly objectionable obstacles or serious engineering difficulties have been found on the routes herewith reported on. Those of a somewhat embarrassing nature have been accounted for previously in this report, and remedies in each instance suggested and estimated for.

In submitting this report I beg leave to mention that the levels of these surveys were run with unusually accurate results by Mr. William Lee, whose efficiency and great care in this kind of work has often before been acknowledged. Very efficient and in all respects satisfactory services were also rendered by the other members of the party, among which I desire to specially mention Mr. John de la Camp, who ran the transit line to November 1, after which this work was done by Mr. J. P. Van Tuyl. Cross-sections were taken by Mr. Ed. M. Hardy, and all the maps have been constructed by Mr. John Ericson.

I am, major, very respectfully, your obedient servant,

G. A. M. LILJENCRANTZ,
Assistant Engineer.

Maj. THOMAS H. HANDBURY,
Corps of Engineers, U. S. A.

LETTER OF MR. EUGENE LEWIS TO THE SECRETARY OF WAR.

MOLINE, ILL., *June* 11, 1885.

DEAR SIR: The inclosed letter of introduction from Chief Justice Morton, of Massachusetts, which I presented to you at the reception held by you at the commandant's house at Rock Island Arsenal, on the occasion of your late visit there, may serve to remind you that I there spoke to you about sending a written brief containing some of the reasons why it would be desirable to make a survey of the Mississippi River from the head of Rock Island to the Mississippi River terminus of the Watertown route for the Hennepin Canal, with a view of determining the feasibility and cost of terminating that route by damming the river near the head of Rock Island, instead of excavating a pool in the rock of the river bed near Watertown, Ill.

I learn that there is an unexpended balance of some $8,000 of the sum appropriated by Congress for this survey August 2, 1882, and suppose, though not competent to give an opinion upon the point, that such a survey would be only a matter of a few hundred dollars at the furthest, and that it is fully within the scope of the appropriation.

In accordance with our understanding at that time, I respectfully submit the following.

Very respectfully,

EUGENE LEWIS.

Hon. WM. C. ENDICOTT,
Secretary of War.

P. S.—This letter and brief were laid aside until a certain person, who was to take the matter in charge, should circulate the inclosed petition. I find on returning home that he has done nothing, and so send it with the few names I had on the petition.

[First indorsement.]

OFFICE CHIEF OF ENGINEERS,
U. S. ARMY,
August 12, 1885.

Respectfully referred to Maj. W. H. H. Benyaurd, Corps of Engineers, for report.
To be returned.
By command of Brigadier-General Newton.

H. M. ADAMS,
Captain of Engineers.

[Second indorsement.]

UNITED STATES ENGINEER OFFICE,
Chicago, Ill., August 24, 1885.

Respectfully returned to the Chief of Engineers, with accompanying report.

W. H. H. BENYAURD,
Major Engineers.

[Third indorsement.]

OFFICE CHIEF OF ENGINEERS,
U. S. ARMY,
September 1, 1885.

Respectfully returned to the Secretary of War, with report of Maj. W. H. H. Benyaurd, Corps of Engineers, of August 24, 1885.

Provision was made in the river and harbor act of August 2, 1882, for the survey of "a canal from a point on the Illinois River at or near the town of Hennepin, by the most practicable and convenient route, to the Mississippi River at or above the city of Rock Island, &c., vol. 22, page 207, U. S. Statutes."

The duty was assigned to Major Benyaurd, and his reports were submitted to Congress. (Copies herewith.)

As all available data bearing upon the choice of the line to be followed by the canal will be of importance to the deliberations of Congress in legislating upon the matter, it is recommended that Major Benyaurd be authorized to collect such information from records of surveys and observations already made, and to supplement them by such additional surveys and observations, including those pertaining to the determination of the best place for the outlet of the canal on the Mississippi as may, in his judgment, be necessary.

JOHN NEWTON,
Chief of Engineers,
Brig. and Bvt. Maj. Gen.

[Fourth indorsement.]

The recommendation of the Chief of Engineers is approved.

JOHN TWEEDALE,
In the absence of the Secretary of War.

WAR DEPARTMENT, *September* 4, 1885.

PETITION.

The undersigned respectfully represent that in their view, for a proper understanding by Congress of the comparative feasibility and practicability of the different routes proposed for the Hennepin Canal, a matter that is likely to come before Congress at its next session, as well as to give Congress a proper understanding of the comparative merits of the different surveyed lines, a survey should be made of the Mississippi River from the foot of Rock Island to the head of Campbell's Island, near the Mississippi River terminus of the Watertown line, so called, with a view of determining the cost of constructing a basin by damming the river near the head of Rock Island, instead of by excavation of the river-bed as contemplated in the survey made in the fall of 1882, and respectfully re-petition you to order such a survey to be made.

C. F. HEMENWAY,
Cashier Moline National Bank.
MOLINE PLOW COMPANY.
A. R. BRYANT.
S. M. HILL.
A. A. CRAMPTON.
W. W. WARNER.
M. R. METZGAR.
C. A. WHEELOCK.
GEO. E. PINGREE.
S. M. WHEELOCK.
WM. CLENDENIN.
MOLINE BUGGY COMPANY,
J. E. BLAKEMORE, *Secretary.*
MOLINE PAPER COMPANY,
S. WHEELOCK, *Secretary.*

Hon. WM. C. ENDICOTT,
Secretary of War.

No directly objectionable obstacles or serious engineering difficulties have been found on the routes herewith reported on. Those of a somewhat embarrassing nature have been accounted for previously in this report, and remedies in each instance suggested and estimated for.

In submitting this report I beg leave to mention that the levels of these surveys were run with unusually accurate results by Mr. William Lee, whose efficiency and great care in this kind of work has often before been acknowledged. Very efficient and in all respects satisfactory services were also rendered by the other members of the party, among which I desire to specially mention Mr. John de la Camp, who ran the transit line to November 1, after which this work was done by Mr. J. P. Van Tuyl. Cross-sections were taken by Mr. Ed. M. Hardy, and all the maps have been constructed by Mr. John Ericson.

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[First indorsement.]

OFFICE CHIEF OF ENGINEERS,
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August 12, 1885.

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To be returned.
By command of Brigadier-General Newton.

H. M. ADAMS,
Captain of Engineers.

[Second indorsement.]

UNITED STATES ENGINEER OFFICE,
Chicago, Ill., August 24, 1885.

Respectfully returned to the Chief of Engineers, with accompanying report.

W. H. H. BENYAURD,
Major Engineers.

[Third indorsement.]

OFFICE CHIEF OF ENGINEERS,
U. S. ARMY,
September 1, 1885.

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MOLINE BUGGY COMPANY,
J. E. BLAKEMORE, *Secretary.*
MOLINE PAPER COMPANY,
S. WHEELOCK, *Secretary.*

Hon. WM. C. ENDICOTT,
Secretary of War.

THE HENNEPIN, OR MICHIGAN, AND MISSISSIPPI RIVER CANAL.

BRIEF STATING REASONS FOR NEW SURVEY ON THE WATERTOWN ROUTE.

The three surveys made in the fall of 1882, under the supervision of Major Benyaurd, of the Engineer Department, United States Army, all adopt the same line from the Hennepin end of the proposed canal until the point is reached on the summit level between the Illinois and Mississippi rivers where the feeder from Rock River, known as the Dixon feeder, strikes the main line of the canal. Here they begin to diverge. The more northerly route (the new survey striking the Mississippi just below the town of Albany, Ill.) is known as the Marais d'Osier or Meredosia line. The next line, the old Hennepin Canal line, striking the Mississippi just below Watertown, Ill., is known as the Watertown line, and the third, diverging from the Watertown route just east of Colona, Ill., following down Rock River to the town of Milan, Ill., and entering the Mississippi between the mouth of Rock River and the city of Rock Island, is known as the Rock Island route.

A comparison of the different routes shows the length of the Meredosia line to be 64.10 miles, the Watertown 64.25 miles, and the Rock Island 75.50 miles in length. (See Report of Chief of Engineers, 1883, Vol. II, Appendix G G 4, pages 1754–73.)

The distance by river from the Mississippi end of the Rock Island line to the end of the Watertown line, near Watertown, is about 8 miles, so that freight starting from Chicago to Rock Island and points below Rock Island, must travel from 2 to 3 miles further by the Rock Island than by the Watertown line, while freights leaving the lakes or Chicago for points on the Mississippi at or above Watertown must travel about 18 or 19 miles further by the Rock Island than by the Watertown line.

The distance between the Meredosia and the Watertown termini is about 23 miles, and as they are almost equal in length, the one being about 800 feet longer than the other, it follows that down-river freights must travel as much further by the Meredosia route as up-river freights travel further by the Watertown route.

The freight shipped by the canal would be taken mainly, it is to be presumed, from points on the river from Saint Paul, Minn., to the Des Moines Rapids near Keokuk, Iowa. Freights for Chicago seeking water carriage below Keokuk would probably descend to the mouth of the Illinois River, and thence be transported to the lakes by the Illinois and Michigan Canal.

As is well known to all who have examined the matter, there are a series of rapids in the Mississippi River from the town of Le Claire, Iowa, nearly down to the Government bridge connecting the island of Rock Island with Davenport, Iowa, a distance of some 14 miles or more, the fall at low water between these points being 20.239 feet.

Nearly two-thirds (12.86) of this fall occurs between this Government bridge and the head of Campbell's Island, a distance of between 7 and 8 miles, the remainder, 7.379 feet, being between this point and the head of the rapids at Le Claire. The fall from a point just above the head of Rock Island to the foot of the rapids, a distance of about 3.5 miles, is 8.57 feet. Of this 8.57 feet of fall, 4.82 feet occurs in a distance of less than three-fourths of a mile, near the head of Rock Island; hence a dam across the channel just at the head of the island that would raise the water at that point at low water 4.29 feet would give a dead level from the head of Rock Island to the head of Campbell's Island, a distance of 4 miles or over, while such a dam that would raise the water 3.19 feet would give the same level to the foot of Campbell's Island, a distance of about 3 miles.

The first-mentioned dam would leave of the rapids from their head to slackwater navigation a fall of (20.239 feet less 12.86 feet) 7.379 feet, and the second dam a fall of (20.239 feet less 11.75 feet) 8.489 feet.

It seems apparent that if navigation of the Mississippi above Rock Island at low water is to be a matter of any considerable importance, a plan similar to the one adopted with the Des Moines Rapids near Keokuk must be adopted in the near future—that is, securing slackwater navigation by throwing a low dam across the Mississippi near the head of Rock Island, and locking around it, either through the south branch, or pool, by the north shore of Rock Island, or by the Iowa shore, as may be found most practicable after proper surveys have been made.

By building the dam as here suggested you have overcome the difficulty of navigation for all but from 7 to 8.5 feet of the rapids, which could be overcome by another dam and lock above Campbell's Island, or by such other means as may be devised.

By means of a dam and lock at the head of Rock Island an ample and satisfactory water-power for the Government arsenal would be afforded. If this improvement were to be made, two of the principal advantages claimed for the Meredosia line over the Watertown line would at once fall to the ground, viz: (1) That a pool would have to be formed at the entrance of the Watertown line into the river, and rock excavation made in the bed of the river, at an estimated cost of some $428,000. (2) That the Watertown line would enter the river on the rapids, since by the method here

suggested the pool formed by this dam would extend from the terminus of the canal to the very doors of the Rock Island Armory and Arsenal.

The advantage to the Government, in the case of an emergency requiring large shipments of heavy ordnance to the lakes, in having the canal so that ordnance could be loaded by cheap and quickly-constructed tramways directly upon boats which were in the canal at their place of landing, ever having it where it would be necessary to tow its boats when loaded for 10 or 12 miles up a swift, tortuous stream through a narrow rocky channel, with a fall of nearly 13 inches to the mile, are too obvious to need any argument.

It may be well to say here, for the information of those who are not acquainted with the location of the Government works and of the pool, that the lower end of the "pool" formed by the present Government dam ends within less than 1,000 feet of the arsenal, and has a depth of from 7 to 10 feet at the lowest stages of the Mississippi, and that with the improvements made during the last three years, and now about completed, at the head of the pool, a channel has been excavated from the river channel, giving a depth of at least 5 feet at the very lowest stages of the river, from the main river to the pool. A dam as suggested would increase it to at least 6½ feet.

As the Government has already invested some millions in establishing an arsenal at Rock Island, and owns this valuable property, is it not worth while for it, in building a canal at its own expense, to make some outlay of money for a canal that will serve the interests of the public equally well, at least, with the other routes, and at the same time give it slackwater navigation from the great lakes to the doors of its great arsenal? War material shipped from Chicago to the arsenal by the Rock Island route must be shipped over the rapids with a rise of 8 feet against a swift, shallow stream (at low water), while material shipped from the arsenal to Chicago must descend the rapids, and be locked back from 8 to 10 feet, and travel several miles farther to reach its destination. On the other hand, by the Meredosia line, freight to and from the arsenal to the Lakes must travel some 23 miles farther, and must either ascend or descend some 12 to 15 feet over the rapids to reach its destination.

In case of a great war, when it might be necessary to ship heavily to and from the arsenal, the railroads leading from Chicago to the arsenal might find their capacity taxed to the utmost, and in such an emergency the canal might be worth to the Government all its cost in transporting material to and from the arsenal. And is not the usefulness of the canal to the Government in the time of war about the only sound argument that can be used in favor of the constutionality of a national appropriation for building a canal?

If this be true, then it would seem that Congress, if it makes an appropriation for such a purpose, should make it in such a way as to make the canal the most useful to the Government in such an emergency.

But the opinion of the commandant at the arsenal as to the comparative value of a canal by the different proposed routes to the arsenal would be worth more than the opinion of almost any civilian, and could undoubtedly be readily obtained if officially called for.

The advantages of the Watertown route, commercially, over the Meredosia or Marais d'Osier route, to all points below the terminus of the Watertown line, must be evident to the most casual observer.

I need not mention the fact that the Marais d'Osier (swamp of the willows) route ends in a swamp on the Mississippi, while the Watertown ends near several large towns, on good ground, within a mile of three railroads, Chicago, Rock Island and Pacific, Chicago, Burlington and Quincy, and Chicago, Milwaukee and Saint Paul.

All freights seeking water carriage to Chicago and the lakes, between Keokuk and Watertown, must ascend the swift streams 23 miles, the rise being made for 7 miles against a fall of 10 feet, and then find itself less than a mile nearer to its destination than when it passed the Watertown terminus. It is true that freights from the Upper Mississippi must descend this 23 miles and must be locked back with a pool formed as contemplated by the surveys some 10 feet, or with a pool formed as suggested by a dam some 7 feet. Yet the added cost to a cargo of locking back by a lock of even 10 feet would be small compared with the added cost of towing a cargo up-stream from Watertown to the mouth of the Meredosia line.

The amount of heavy freights including iron, steel, coal, grindstones, and small quantities of brick and building stone, shipped from the lakes to the single town of Moline now exceeds 25,000 tons annually, and is yearly increasing in amount. I have no figures of the amount of building material shipped by the Government from Joliet, Ill., to the island (Joliet being directly upon the Illinois and Michigan Canal, of which the proposed canal would be a branch), but it must be several thousand tons annually. Some of these items would be at once largely increased by the construction of a canal which would materially decrease the cost of transportation—notably, coal, iron, and building materials like brick, stone, and slate.

Davenport, Iowa, Rock Island, Ill., Muscatine, Iowa, and many smaller towns, besides Burlington and Keokuk, Iowa, are railroad termini.

The building of the canal by the Rock Island line would then cause all freights seeking water transportation to travel from 2 to 18 miles farther to reach their destination, and would compel all goods freighted from the upper river to descend 20.25 feet over rapids to be locked back again.

The question fairly arises whether, to properly complete the survey of the Watertown route, surveys should not be made and estimates procured of the expense of forming a pool in the river by a dam at or near the head of Rock Island, and locks therefrom to the river below, and if it should be found that the cost of constructing such a pool was less or did not greatly exceed the cost of excavating a pool as contemplated by the survey of the Watertown line already made, the question would then arise whether such a method of improving the navigation of the Mississippi across these difficult and dangerous rapids would not, standing upon its own merits, independent of any question of canals or other advantages, be worthy of serious consideration.

That this method of improving the river would be of great advantage to the water-power at the arsenal, which the Government owns and has developed at a great expense, I think, admits of no question. A letter from Colonel Flagler, written to Deere & Co. sometime since, so well sets forth some of the advantages of improving the water-power and navigation by this means, that, although the letter is a private one, and no permission has been obtained from the writer to use it in this connection, yet the nature of its contents and subject-matter are such that no apology is necessary for using it in this connection. A copy of this letter is appended to this argument. Colonel Flagler has been in command of the arsenal since the death of General Rodman in 1871, and his opinion, both from his known ability in his particular line and his long familiarity with the locality, will command the highest respect from all who are acquainted with him.

Another consideration presents itself in this connection: suppose either the Meredosia (Marais d'Osier) or the Rock Island route be adopted by Congress, and the canal be built, how long after the canal is built will it be before Congress will be asked to build a branch canal from Albany or Rock Island, as the case may be, to the main line at or near the present surveyed lines. If the canal proves to have a tithe of the advantages claimed for it, after it is built, then the section left practically without the advantages of a canal would demand either an improvement of the river, such as has been suggested, by dams and locks or a branch canal, thus bringing a much greater expense upon the Government than the original Hennepin or Watertown route, and in neither case accommodating the Government arsenal nearly as well as the Watertown route would do.

Another matter is worthy of attention in this connection. The report of the surveys made under directions of Major Benyaurd of the three routes will be found in the Report of the Chief of Engineers for 18-3, Vol. II, Part 2, beginning at Appendix GG 4, page 1754, and ending on page 1773 of that volume.

It will be noticed that very little time was expended on the survey of the Rock Island and Watertown routes. It will be seen that (pages 1755 and 1767) the Watertown line had been previously surveyed, in 1870, under the direction of Colonel Macomb, of the United States Engineer Corps.

This (1882 survey) was the first official survey ever made of the Rock Island route, and it is no secret in this vicinity what influences brought about this survey by an engineer favorable to this route for the canal. A careful reading of this report, pages 1768 and 1769, will show that it partook about as much of the nature of a reconaissance as of a survey, per example, page 1769, lines 12 and 13: "It is *supposed* that the construction of a protecting dike from the Milan dams up stream about a mile on the left bank will prevent any further submergence on account of raising the dams." In line 8 of the same page it is stated that "it will be necessary to raise existing dam at Milan 3 feet."

When it is known that the village of Milan, having property that in the case of its destruction by the raising of the dam 3 feet would readily show up a value of $1,500,000, is placed at the mercy of a flood in Rock River, it would seem that before the Government should undertake to build such a dike that it should have a very careful estimate of the probable effect, or that it should as a preliminary step secure the assent of all real estate owners liable to be damaged by such an overflow to the raising of the dam and the building of such an addition to the dams. It is true the owners of the water-power at Milan, if sufficiently protected, would be greatly benefited by the raising of such a dam. In fact, it is said they would gladly part with their property to the Government for an adequate consideration, it not having proved as successful an investment as had been hoped. But any private individual who owns the water-power and has seen Milan twice within the last six years with all its streets flooded from Rock River and its buildings in imminent danger of being carried away, would require carefully considered surveys and a well-constructed dike before

he would venture to raise the present dams a single foot, to say nothing of raising them 3.

The complications that might arise, and the conflicting rights in regard to the various dams to be raised might be serious matters, and the expense of getting through Milan is only a matter of conjecture.

Again, same page, lines 26 and 27, "No basin has been estimated for at this terminus, as it is supposed a good harbor can be found at the foot of Rock Island," another matter of conjecture.

The saw-mill companies who have lost thousands and tens of thousands of feet of logs by an ice gorge on Credit Island, just below Davenport, at a number of different times within the last ten years, will be glad to learn that this conjecture can be verified, since a knowledge of the fact would have been worth thousands of dollars to them in times past, if, indeed, it be a fact.

Again, the same page, 28th line, "It should be remarked that but few soundings were taken in Rock River, the ice not being strong enough to support a man, but sufficient to prevent the use of a skiff; hence the bottom line, as shown on the accompanying profile, is to a great extent imaginary, though sufficiently accurate for the object in view," and immediately after, the report goes on to say, "On account of the frozen condition of the ground, and a covering of snow at the time of surveying the latter part of this route, the nature of the soil may differ from that assumed in the estimate of cost." When we know that the information which the engineers were obliged to rely upon in estimating the cost of this line was derived from the friends of the line, we may well opine that the nature of the obstacles to be overcome on this line would not prove to be any less serious than the estimates show.

Practical men, acquainted with the building of dams, scout at the idea of adding 3 feet to the height of the present Milan dams without rebuilding them from their foundations, and say that no sane person would entertain such a proposition for a moment. If they are correct in their opinions on this point, a few hundred thousand dollars should be added to the estimates of the Rock Island route for rebuilding these dams.

On page 1769 the report says, 10th and 11th lines: "These dams (in Green River) will cause a submergence of several hundred acres of lowlands, which item has been considered in the estimates for damages."

Old residents along Rock and Green rivers claim that adding 3 feet to the height of the Milan dams will cause great injury to thousands of acres of valuable lands reclaimed (in the last twenty years) by underdraining the same.

Again, in reference to the Marais d'Osier route, it is claimed by those who know the ground, that the open ditch, which it is proposed to cut in the low bottom lands for several miles before entering the Mississippi, will run for a part of the way at least through an oozy mud that will rapidly and constantly fill up the canal, unless the banks are diked and protected at great expense, and in such a way as to seriously interfere with the flow of the current between the Mississippi and Rock rivers at high water.

The writer of this recollects that in conversing with the assistant engineer in charge of these surveys, Mr. H. B. Herr, he asked the question whether there might not be a better way to get into the Mississippi at Watertown than to excavate a pool at the expense as estimated of $428,000, by damming the Mississippi at the head of Rock Island. To which Mr. Herr replied very likely there might be, but it did not come within the purview of their instructions from the Secretary of War to make such a survey.

Now, as the Hennepin Canal is becoming a prominent question before Congress, would it not be well that a survey be made for the purpose named, so that, in case Congress should decide during the coming winter to begin the work, they should have all necessary data upon which they might predicate any action they may be disposed to take.

I might add that I have spoken, on pages 2 and 3 of this brief, of a dam that would raise the water at the head of Rock Island 4 feet at low water as giving a dead level to the head of Campbell's Island, as an illustration merely. A dam of such height that it would raise the water to the height of 4 feet at the head of Rock Island would be, as I understand it, entirely unnecessary.

I learn from those versed in such matters that a dam that would raise the water 18 inches at the head of Rock Island by reducing the velocity of the water would probably increase the depth of water at Watertown fully 4 feet, at the lowest stage of water.

I might also suggest that raising the water at the head of Rock Island at low water 18 inches at lowest stages, would probably raise it less than 6 inches at highest stages. A section of the bed of the river may be roughly compared with an equilateral triangle resting on its apex, the base of the triangle being represented by the surface of the water, the altitude by the depth in deepest point of channel of the water. I sup-

pose at the highest stage of the water this would be 25 feet, at the lowest 5 feet. The base at the highest stage 2,000 feet, at the lowest stage 400 feet. The area of the river section would be not far from the proportion of 2,000÷2×25=25,000 : : 400÷2×5=1,000.

If you increase the depth 1½ feet at lowest stage, you have a triangle, base 520 feet; altitude 6½ feet; additional area (520÷2×6½), less (400÷2×5)=(1,690--1,000)=690 feet; add this 690 feet at surface line of 2,000 feet as a segment to base of triangle you have base-line about 2,040 feet, altitude approximately 25½ feet, almost exactly 6 inches increase at highest stage.

The probabilities are that the river would be less affected at high water than would appear from this illustration by such a dam. (Note.—The figures given for the fall of the Mississippi over the Rock Island Rapids from Le Claire to the foot of Rock Island, pages 2 and 3 of this brief, are taken from the notes of surveys in the United States Engineer's office at the city of Rock Island, Ill.)

EUGENE LEWIS,
Moline, Ill.

LETTER OF LIEUTENANT-COLONEL D. W. FLAGLER, ORDNANCE DEPARTMENT, TO MESSRS. DEERE & CO.

ROCK ISLAND ARSENAL, ILL., *March* 30, 1883.

SIRS: Your letter of the 15th of February was received during my absence in California.

I have given much attention to the subject of extending the water-power wing-dam across the river, both for the benefit of the water-power and navigation, and have discussed the matter in reports to the Chief of Ordnance, made several years ago.

It should be a low dam, so that it would not greatly impede the flow of the river and raise the river above it, except during low water, when this action would be desirable. It should have an opening 300 feet wide through it for the passage of rafts and down boats, if they desire it, even at low water.

A canal with a lock, similar to the canal and lock at Keokuk, should be constructed along the Iowa shore for the use of vessels during the time of low water. The wing-dam would be so low that in connection with the channel opening through it, it would not interfere with navigation through it—it would not interfere with navigation in times of high water—that is, when there is enough water on the rapids below the wing-dam for easy navigation.

(1) It would be of great value to navigation on the rapids above the wing-dam, and would probably give sufficient depth of water at the lowest stages nearly up to Le Claire.

(2) The benefit to navigation on the part of the rapids below the wing-dam in enabling vessels to pass the rapids in all weather, at all times of the night, and by making the navigation perfect at all low stages of the river, would, in my judgment, warrant the building of the canal and lock.

(3) The capacity of the water-power could be quadrupled by the improvement, and permit the use of such portion of the increased power as might be desirable along the Davenport shore.

If the Hennepin Canal should enter the river at any point on the rapids above Rock Island, this improvement of navigation on the rapids, and particularly raising the water—that is, increasing the depth in the river at the mouth of the canal—would be of the highest importance.

Very respectfully, your obedient servant,

D. W. FLAGLER,
Lieut. Col. of Ordnance, Commanding.

Messrs. DEERE & Co.,
Moline, Ill.

REPORT OF MAJOR W. H. H. BENYAURD, CORPS OF ENGINEERS, ACCOMPANYING HIS INDORSEMENT OF AUGUST 24, 1885, ON LETTER OF MR. EUGENE LEWIS TO THE SECRETARY OF WAR.

UNITED STATES ENGINEER OFFICE,
Chicago, Ill., August 24, 1885.

GENERAL: I have the honor to present the following report, called for in your indorsement of the letter of Mr. Eugene Lewis, herewith.

By the terms of the act for the survey of what is known as the Hennepin Canal, the Secretary of War was authorized and directed to survey and locate a canal from

a point on the Illinois River, at or near the town of Hennepin *by the most practicable route to the Mississippi River at or above the city of Rock Island.*

My knowledge of the country in which the western division of the canal would lie led me to select a route (after leaving the summit level) that would terminate at the outlet of the Marais d'Osier. This depression, which forms, at high stages of water, a connection between Rock River and the Mississippi, had formerly been surveyed and found practicable for a canal communication between the two rivers. The surveys demonstrate, in my opinion, that the Marais d'Osier route is the most practicable and economical line between the Illinois and the Mississippi rivers, considering that question the main one involved, and omitting all local issues. The line was adopted after careful reconnaissances, and the survey thereof was almost completed when the local interests at Moline, Davenport, and Rock Island were introduced into the question and the surveys to Watertown and Rock Island were determined upon. The advocates of these lines carried their efforts so far as to demand the abandonment of the survey of the Marais d'Osier line.

As the act contemplated only a canal communication between the two rivers, I did not deem that it was within the province of my duties to take into consideration the improvement of the Mississippi, with a view of reaching any particular locality. Appropriations are made for the improvement of the river under plans now in course of execution, and it would have been beyond my duties to discuss any plan that would give a depth of 7 feet at low water, which is the least depth provided for the canal. The surveyed lines terminated, as all previous ones had, at the channel of the Mississippi.

It was at first intended only to survey the Marais d'Osier route, and then if the other lines were to be considered the estimates therefor could be made up from data furnished by former surveys. It was finally decided, however, to rerun these lines, and a party was at once organized and put into the field.

The season was then well advanced, and, as mentioned in the report, the latter part of the survey was presented under somewhat adverse circumstances. Still the instrumental work was well done, as shown by the checks made on the other surveys of Rock River and the Mississippi; and we had reliable information from sources as well as from a survey of Lower Rock River made for the water-power companies at Milan. It was, under the circumstances, impossible to make a thorough survey of the entire region, and the amount of land that could be overflowed could not be accurately determined. At the same time the frozen condition of the ground prevented examinations as to the nature of the subsoil, and this information could only be gained from people in the vicinity.

Though there may be objections to the plan proposed for the canal in the vicinity of Milan, a change could be made at that point that would obviate any difficulties, should the Government adopt that route and propose to expend the estimated amount, $6,672,000. By reference to the report of the survey of Rock River, made in 1867 by General J. H. Wilson, with a view to the improvement of that stream by slackwater navigation, it will be seen that the line followed the channel of Rock River until a point was reached about 3½ miles above Milan (then called Camden). It then left the river and followed down the right bank to Milan, was then carried across the neck of land between the two rivers, on a line about the same as ours, and entered the Mississippi near the same point.

The line was carried to this terminal point from the fact that an entrance was desired into the Mississippi free from the bars and shoals found in the vicinity of the mouth of Rock River. The estimated cost of these 7 miles of work, according to General Wilson's estimates, was $765,516.45, and in our line, $607,521.79. In the former instance the locks were larger and the prism of the canal had an excess of 80 square feet. It may be seen, then, that the estimated cost will not be so greatly increased.

In my opinion, the relative standing of the three routes to fulfill the conditions required by the law would be, first, the Marais d'Osier; second, Watertown; and third, Rock Island.

The plan advocated by Mr. Lewis has been proposed, and has merit, and should the Government adopt the Watertown line it might be advisable to take it into consideration. Nearly all the data required could be obtained from the surveys of the Rock Island Rapids, now in Major Mackenzie's office. He could make the report in connection with the improvement of the rapids, or I could be directed to confer with him in relation to the matter. The amount of available funds now on hand is $8,261.51, and as there are disputed points brought up by the advocates of each of the three routes I would respectfully request authority to make such surveys or examinations as I may deem necessary in connection therewith.

In the brief presented by Mr. Lewis the following paragraph occurs:

"This (1882 survey) was the first official survey ever made of the Rock Island route, and it is no secret in this vicinity what influences brought about this survey by an engineer favorable to this route for the canal."

The language is not very definite, and it is therefore difficult for me to understand exactly what Mr. Lewis means by his insinuation. If he means that influences were brought to bear upon me to have that survey made in the interests of Rock Island, or that I selected an assistant to run the line who was known to be favorable to the route, or for the purpose of making a favorable report thereon, I can only say that the statement is utterly devoid of truth. It is too well known what my opinion of the Rock Island route was.

The papers are returned herewith.

Very respectfully, your obedient servant,

W. H. H. BENYAURD,
Major of Engineers.

Brig. Gen. JOHN NEWTON,
Chief of Engineers, U. S. A.

LETTER OF MAJOR THOMAS H. HANDBURY, CORPS OF ENGINEERS.

UNITED STATES ENGINEER OFFICE,
Chicago, Ill., December 9, 1885.

DEAR SIR: There has been referred to this office, for consideration and report, a communication addressed to the honorable the Secretary of War, by Mr. Eugene Lewis, a citizen of Moline, Ill., in which he proposes, in connection with the location of the western terminus of the proposed Hennepin Canal, to place a dam across the Mississippi River, near the head of Rock Island, in terms as follows:

"As is well known to all who have examined the matter there are a series of rapids in the Mississippi River from the town of Le Claire, Iowa, nearly down to the Government bridge, connecting the island of Rock Island with Davenport, Iowa, a distance of some 14 miles or more; the fall at low water between these points being 20.239 feet. Nearly two-thirds (12.86) of this fall occurs between this Government bridge and the head of Campbell's Island, a distance of between 7 and 8 miles, the remainder, 7.379 feet, being between this point and the head of the rapids at Le Claire.

"The fall from a point just above the head of Rock Island to the foot of the rapids, a distance of about 3.5 miles, is 8.57 feet. Of this 8.57 feet of fall, 4.82 feet occurs in a distance of less than three-fourths of a mile, near the head of Rock Island, hence a dam across the channel, just at the head of the island, that would raise the water at that point at low water 4.29 feet, would give a dead level from the head of Rock Island to the head of Campbell's Island, a distance of 4 miles or over, while such a dam would raise the water 3.19 feet, would give the same level to the foot of Campbell's Island, a distance of about 3 miles. The first-mentioned dam would leave of the rapids, from their head to slack water navigation, a fall of (20.239 feet, less 12.86 feet) 7.379 feet, and the second dam a fall of (20.239 feet, less 11.75 feet) 8.489 feet.

"It seems apparent that if navigation of the Mississippi above Rock Island at low water is to be a matter of any considerable importance a plan similar to the one adopted with the Des Moines Rapids near Keokuk must be adopted in the near future, that is, securing slackwater navigation by throwing a low dam across the Mississippi near the head of Rock Island, and locking around it either through the south branch or pool by the north shore of Rock Island, or by the Iowa shore, as may be found most practicable after proper surveys have been made. By building the dam as here suggested you have overcome the difficulty of navigation for all but 7 to 8.5 feet of the rapids, which could be overcome by another dam and lock above Campbell's Island, or by such other means as may be desired.

* * * * * * *

"I might add that I have spoken on pages 2 and 3 of this brief of a dam that would raise the water at the head of Rock Island 4 feet at low water as giving a dead level to the head of Campbell's Island as an illustration merely."

Inasmuch as it is conceived that a dam of any description or height located as above described must greatly affect the commerce on the Mississippi River passing Rock Island, in which you are interested, I take the liberty of requesting an expression of your views in this matter, in order that the interests which you represent may receive due consideration in the case, as it will be presented to the Secretary of War.

Very respectfully, your obedient servant,

THOS. H. HANDBURY,
Major of Engineers.

LETTER OF THE CHIPPEWA LUMBER AND BOOM COMPANY.

CHIPPEWA LUMBER AND BOOM COMPANY,
Chippewa Falls, Wis., December 18, 1885.

DEAR SIR: Yours of 9th instant is at hand requesting an expression of my views regarding the building of a dam across the Mississippi River near the head of Rock Island, in connection with the western terminus of the proposed Hennepin Canal.

Your communication was received at an opportune moment, as there had been a meeting called, to convene at Chippewa Falls on the 16th instant, of Mississippi and Chippewa river lumbermen. At said meeting there were represented nine-tenths of the capacity and capital invested in manufacturing lumber on the Chippewa River, and four-fifths of the Mississippi River mills located between Lake Pepin and Saint Louis.

At a meeting representing such vast interests I presented your letter and it was the unanimous expression that the building of the proposed dam would seriously cripple the lumbering interests of all who either manufacture on the Chippewa and market their product in the raft largely below the head of Rock Island, or manufacture at Rock Island and points below, and run their logs in rafts from the Wisconsin and Minnesota pineries to their mills. The building of such a work would necessarily take a series of years to complete, which would, for the time, materially obstruct the navigation of the river by rafts, and consequently cause a suspension of business, which in many cases would prove financially disastrous. There are engaged at least thirty steamboats solely in running rafts of logs and lumber, from points on the Upper Mississippi to places below the point where the proposed dam is located, and there passes the head of Rock Island, during the season of navigation, an average of ten such boats per day. A system of locks over the proposed dam could hardly be made to accommodate the lumber traffic alone, to say nothing of the many other boats engaged in other commercial pursuits daily passing up and down.

I am personally largely interested in ten mills—seven in Wisconsin, two in Illinois, and one in Minnesota—manufacturing to the combined extent of 285,000,000 feet of lumber annually, and, as representing such interests, I do earnestly protest against the building of a dam across the Mississippi as being a project not feasible, ruinous to the free and rapid navigation of the river, and one which would seriously and disastrously affect the largest portion of the lumber interests in the Mississippi Valley.

I am, sir, very truly yours,

F. WEYERHAEUSER,
President.

Maj. THOS. H. HANDBURY, U. S. A.

LETTER OF MESSRS. TURNER, HOLLINGSHEAD & CO.

TURNER, HOLLINGSHEAD & COMPANY,
TOW-BOAT AND PACKET LINE,
Lansing, Iowa, December 18, 1885.

DEAR SIR: Your communication of the 9th instant to hand and carefully noted, and in reply will say that the dam located at or near the city of Moline would be *good* for the *city* of *Moline;* it would afford her, in connection with what she has already got, a magnificent water-power, and no doubt but what the improvements, if made, would be of great benefit to her. But as a practical river man of thirty years' experience, I must say that it would destroy navigation on the Mississippi between the head rapids and Saint Louis.

The expense of getting logs and lumber through the locks would be so great as to entirely destroy this kind of navigation, which is now, and will continue for several years to come, to be the main commerce on the Upper Mississippi River. Statistics will show that there are now engaged in this business eighty steamers, as against fifteen in all other business, passing over these rapids.

I enter our protest against this scheme, for in our opinion it would be a damage to navigation instead of a benefit, and would injure the many for the benefit of the city of Moline, and the great bulk of river and lumber men will fight it.

Respectfully, &c.,

TURNER, HOLLINGSHEAD & CO.,
By J. M. TURNER.

THOS. H. HANDBURY,
Major of Engineers.

LETTER OF THE SUPERINTENDENT OF THE DIAMOND JO LINE.

DIAMOND JO LINE STEAMERS, SUPERINTENDENT'S OFFICE,
Dubuque, Iowa, December 21, 1885.

DEAR SIR: Replying to your favor December 9, regarding the building of a dam across the Mississippi at the head of Rock Island, would say that it looks to me as though the damming of the river at this point would be an obstruction instead of a benefit to navigation of the Upper Mississippi, and I would oppose it as vigorously as possible.

At present we have trouble at the rapids only in low water, while with the dam proposed we would be delayed at all stages of water, and the chances are that in low water the danger below the dam would be even greater than now, unless two dams and two locks were put in.

This work, of course, would be very expensive, and the cost would be charged to the general appropriation for Upper Mississippi River, and I am satisfied that the money could be spent where it would be of much more value to the river interests.

The natural channel of the river should be improved and made as safe as possible before any money is spent in improving the water-power of Moline, or any other place, under pretext of benefiting while really injuring navigation.

Respectfully, yours,

E. M. DICKEY,
Superintendent.

THOMAS H. HANDBURY,
Major of Engineers, U. S. A.

LETTER OF MR. SAM. VANSANT.

WINONA, MINN., *February* 2, 1886.

DEAR SIR: Your communication in regard to the damming of the Mississippi River at one or more points on the rapids between Rock Island, Ill., and Le Claire, Iowa, received.

After giving the matter *very careful* thought, I am of the opinion that any dam or dams built between points mentioned would result in *great damage* to the commerce of the river.

The improvement of the upper rapids by the Government has been of incalculable benefit to navigation, and the plan adopted preferable to the canal system.

I am still further of the opinion that if the matter was thoroughly understood by those engaged in the commerce of the river, that they would vigorously oppose any attempt to obstruct the river in the proposed manner; especially would this be true of those engaged in the transportation of logs and lumber.

Very respectfully, yours,

SAM. VANSANT.

Maj. THOS. H. HANDBURY,
Engineer Corps, U. S. A.

LETTER OF MESSRS. M'DONALD BROTHERS.

MCDONALD BROTHERS TOW-BOAT LINE,
La Crosse, Wis., February 3, 1886.

DEAR SIR: Your favor of the 1st instant, referring to your communication of December 9, is at hand.

We confess the matter should have had prompt attention. We now beg leave to submit the following reply:

The principal business now done on the Upper Mississippi is the towing of logs and lumber in rafts. The tonnage of these products largely exceeds that of all others combined. The usual size of a raft is from 500 to 600 feet in length, about 250 feet in breadth, and about 2 feet in depth.

The Rock Island Rapids are no hindrance to the safe passage of rafts, excepting in low water. At such times rafts are divided into two sections, and each section is taken over with comparative safety and dispatch. There is no immediate necessity for any greater depth of channel on the rapids, as there is now a low-water depth of 4 feet, or fully 1 foot more than there is in the channel at various points, both above and below.

If dams were erected as indicated in the proposition to which you refer, and provided with locks of the same dimensions as those on the canal at the Des Moines Rapids, an ordinary six-beale log raft would require to be divided into twelve sections, and each section to be locked through separately. We do not believe that the locks could be operated with sufficient rapidity to accommodate as much business as now done. The delay and consequent expense would be so great that the towing of rafts would be abandoned to points below the rapids, and would destroy that very important industry, the manufacturing of lumber at those places.

As you state that the proposed obstructions are suggested in connection with the western terminus of the proposed Hennepin Canal, we take the liberty of stating that the amount of grain tributary to, and liable to be transported on the river, is quite insignificant, and as the railways which penetrate the interior are parts of trunk system reaching to the Lakes, the carrier by river can offer no advantages which would be likely to induce the railways to relinquish their east-bound freight at river points.

The deduction would then seem to be logical that with the additional change of bulk involved, no grain carried by rail would be transferred to the proposed Hennepin Canal. We therefore protest against the proposition to place dams and locks on the Rock Island Rapids, believing as we do that they would prove disastrous to the very important interests before mentioned, and of no public benefit.

We are, very respectfully, your obedient servants,

McDONALD BROS.

THOS. H. HANDBURY,
Major Corps of Engineers, U. S. A.

COMMERCIAL STATISTICS.

The following commercial statistics bearing upon the question of water communication between the Mississippi River and Lake Michigan have been compiled from reliable sources:

Statement of vessels entered and cleared at certain ports in the United States for the year ending June 30, 1885, *foreign and coastwise.*

[From report of Chief Special Agent to Secretary of Treasury, page 8.]

Ports of—	Number of vessels arrived.			Number of vessels cleared.			Joint total.
	Foreign.	Coast-wise.	Total.	Foreign.	Coast-wise.	Total.	
Baltimore	660	1,581	2,241	732	1,748	2,480	4,720
Boston	2,462	728	3,190	2,332	898	3,230	6,420
New York	5,875	1,914	7,789	5,395	3,075	8,470	16,259
New Orleans	763	271	1,034	773	225	998	2,032
Philadelphia	1,230	761	1,991	1,020	1,275	2,295	4,286
Portland and Falmouth	255	449	704	412	299	711	1,415
San Francisco	818	217	1,035	880	388	1,268	2,303
Total	12,063	5,921	17,984	11,544	7,908	19,452	37,436
Chicago	124	10,313	10,437	243	10,303	10,546	20,983

Comparative statements of vessels entered and cleared, foreign and coastwise, at certain ports in the United States for the year ending June 30, 1885.

[Number I.]

Ports of—	Total arrivals.	Total clearances.	Total.
Baltimore	2,241	2,480	4,721
Boston	3,190	3,230	6,420
New Orleans	1,034	998	2,032
Philadelphia	1,991	2,295	4,286
San Francisco	1,035	1,268	2,303
Total	9,491	10,271	19,762
Chicago	.....	.....	20,983

Comparative statement of vessels entered and cleared, &c.—Continued.

[Number II.]

Ports of—	Total arrivals.	Total clearances.	Total.
Baltimore	2,241	2,480	4,721
New York	7,789	8,470	16,259
Total	10,030	10,950	20,980
Chicago	.....	.....	20,983

[Number III.]

New York	7,789	8,470	16,259
Philadelphia	1,991	2,295	4,286
Total	9,780	10,765	20,545
Chicago	.....	.....	20,983

[Number IV.]

New York	7,789	8,470	16,259
New Orleans	1,034	998	2,032
San Francisco	1,035	1,268	2,303
Total	9,858	10,736	20,594
Chicago	.....	.....	20,983

[Number V.]

New York	7,789	8,470	16,259
Portland and Falmouth	704	711	1,415
San Francisco	1,035	1,268	2,303
Total	9,528	10,449	19,977
Chicago	.....	.....	20,983

Aggregate receipts at the ports mentioned for fiscal year ending June 30, 1885.

Ports.	Receipts.	Ports.	Receipts.
New York	$125,249,110 11	Chicago	$4,163,785 17
Boston	19,730,908 12	Baltimore	2,081,766 51
Philadelphia	12,491,513 35	New Orleans	1,511,483 75
San Francisco	6,743,800 87	Portland and Falmouth	634,052 41

UPPER MISSISSIPPI RIVER.

STATISTICS OF COMMERCE AND NAVIGATION.

(Report of the Chief of Engineers, U. S. Army, 1885, page 1665.]

Lumber.—The most important business interest on the Upper Mississippi River and its principal tributaries isthe lumber trade, which gives employment to great numbers of men and upwards of one hundred steamboats, which are used in guiding and propelling rafts. Between the mouth of the Chippewa and Saint Louis there are eighty mills on the main river, with an annual day-sawing capacity of 800,000,000 feet, employing some sixteen thousand men and representing about $20,000,000 capital.

On the Upper Mississippi and its tributaries, the Saint Croix, Chippewa, Wisconsin, and Black, there are about two hundred mills engaged in the manufacture of lumber, the greater part of which product is floated into the former stream.

Steamboats and freights.—The principal steamboat lines on the Upper Mississippi River are the Saint Louis and Saint Paul Packet Company and the Diamond Jo Line. There are also independent boats carrying freight and passengers.

During 1884 the Diamond Jo Line carried 173,517 tons of freight and 32,905 passengers. Statistics of the other line could not be obtained.

Statement of amount of freight received at and shipped from Saint Louis by the Upper Mississippi River for five years.

Saint Louis.	1884.	1883.	1882.	1881.	1880.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Received	129, 895	126, 330	135, 540	190, 815	226, 095
Shipped	43, 110	60, 020	71, 325	54, 295	55, 260
Total	173, 005	186, 350	206, 865	245, 110	281, 355

Movement in flour and grain by Upper Mississippi boats in 1884.

Saint Louis.	Flour.	Wheat.	Corn.	Oats.	Rye.	Barley.
	Barrels.	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*
Receipts	48, 080	459, 420	95 700	631, 071	8, 323	205 278
Shipments	4, 558	22, 210	22, 413	2, 935	1, 120	56
Total	52, 638	481, 630	118, 113	634, 006	9, 443	205, 334

The following table affords a comparative view of the relative amount of navigation at various localities on the Upper Mississippi River for the last three years:

Statement of steamers, barges, and rafts passing various bridges.

Locality of bridge.	Steamboats.			Barges.			Rafts.		
	1884.	1883.	1882.	1884.	1883.	1882.	1884.	1883.	1882.
Hastings	845	746	2, 563	980	751	710	8	(*)	60
Winona	2, 992	4, 893	5, 627	905	828	942	2, 007	1, 352	1, 939
La Crosse	5, 160	4, 316	4, 728	542	506	576	1, 920	1, 663	1, 707
Dubuque	3, 451	3, 585	4, 345	1, 119	867	822	1, 401	1, 422	1, 022
Sabula	2, 510	2, 454	2, 584	1, 248	594	317	1, 097	2, 083	(*)
Clinton	2, 926	3, 006	3, 185	628	592	670	†747	†499	†437
Rock Island	2, 708	2, 561	2, 593	203	142	293	1, 083	972	984
Burlington	1, 966	1, 943	2, 323	258	291	466	440	379	425
Keokuk	3, 014	1, 856	2, 034	1, 624	400	814	†296	†287	444
Quincy	1, 658	1, 648	2, 087	430	440	654	418	380	391
Hannibal	2, 863	2, 886	3, 031	504	472	578	†105	262	300
Louisiana	1, 212	1, 513	1, 249	308	339	472	126	113	111

*No record of rafts. †Partial record.

Receipts of flour and grain at the principal Western river and lake ports, for each year, 1880 *to* 1884, *inclusive.*

[Report Chicago Board of Trade, 1884.]

Ports.	Flour.	Wheat.	Corn.	Oats.	Rye.	Barley.	Total.
1880.	*Barrels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*
Saint Louis	1,703,874	21,022,275	22,298,077	5,607,078	468,755	2,561,992	59,625,610
Peoria	197,427	559,620	13,550,650	8,152,205	1,123,625	684,880	24,959,402
Chicago	3,215,389	23,541,607	97,272,844	23,490,915	1,869,218	5,211,536	165,855,370
Milwaukee	2,392,147	10,919,954	2,148,857	2,031,878	779,211	3,238,684	29,883,246
Duluth	519,640	2,987,629	2,217,400	74,000	.....	.....	7,617,409
Detroit	341,334	9,835,164	427,976	507,797	7,536	300,017	12,614,493
Toledo	802,816	28,969,983	21,825,928	4,240,679	166,641	254,583	59,070,486
Total	9,172,627	97,836,232	159,741,732	44,104,552	4,414,986	12,251,692	359,626,016
1881.							
Saint Louis	1,620,906	13,243,571	21,259,310	6,305,050	469,769	2,411,723	50,983,500
Peoria	142,870	552,645	17,568,565	7,153,950	900,775	575,770	27,394,620
Chicago	4,815,239	14,824,990	78,393,315	24,861,538	1,363,552	5,695,358	146,807,329
Milwaukee	3,351,296	10,447,747	980,615	2,347,635	681,636	4,132,834	33,680,299
Duluth	625,776	3,568,026	29,131	.....	.....	.....	6,413,149
Detroit	447,909	5,807,073	790,357	727,366	4,731	338,564	9,683,681
Toledo	500,178	12,697,413	12,629,750	3,331,477	114,792	321,854	31,346,087
Total	11,504,174	61,141,465	131,660,043	44,727,016	3,535,255	13,476,103	306,308,665
1882.							
Saint Louis	2,003,424	20,774,987	14,541,555	8,138,516	403,707	1,818,968	54,693,141
Peoria	62,271	347,540	11,579,200	7,661,975	825,065	635,410	21,329,410
Chicago	4,179,912	23,008,596	49,061,755	26,802,872	1,984,516	6,488,140	126,155,483
Milwaukee	3,354,304	7,828,021	2,037,680	2,581,808	491,006	4,653,192	32,686,075
Duluth	338,401	4,198,833	77,906	36,016	.....	.....	5,835,559
Detroit	259,422	6,442,899	1,196,351	1,356,958	7,061	720,616	10,391,284
Toledo	987,800	15,855,420	5,946,008	2,788,322	181,796	95,968	29,312,614
Total	11,185,534	78,456,296	84,440,455	49,366,467	3,893,151	14,412,294	280,903,566
1883.							
Saint Louis	1,585,670	15,000,704	20,001,450	6,452,757	532,270	2,360,798	51,983,494
Peoria	67,751	340,880	9,363,225	11,503,975	1,023,725	726,000	23,262,684
Chicago	4,295,515	20,364,155	74,412,319	36,502,283	5,484,259	8,831,899	164,924,732
Milwaukee*	3,380,799	9,025,164	2,256,862	2,836,529	620,873	6,189,576	36,142,600
Duluth*	615,000	6,700,000	195,000	22,000	.....	.....	9,684,500
Detroit	176,191	6,857,366	1,823,087	1,553,249	6,000	765,531	11,798,093
Toledo†	1,000,000	23,818,000	10,506,600	2,584,600	451,900	177,700	42,038,800
Total	11,120,926	82,106,269	118,558,543	61,455,393	8,119,027	19,551,504	339,834,903
1884.							
Saint Louis	1,456,153	16,368,809	19,607,325	7,036,951	585,218	2,625,841	52,776,832
Peoria	263,210	646,830	9,726,530	13,343,370	734,705	573,250	26,209,130
Chicago	4,960,830	26,397,587	59,580,445	40,082,362	3,327,516	7,849,829	159,561,474
Milwaukee	2,511,624	10,167,521	788,680	1,547,486	300,562	4,268,554	28,375,111
Duluth‡	.....	13,527,672	.....	.....	.....	.....	13,527,672
Detroit	122,739	8,083,767	1,677,582	1,252,075	.....	602,445	12,168,194
Toledo	430,900	25,057,284	12,056,306	1,616,748	543,941	135,548	41,348,877
Total	9,745,456	100,249,470	103,436,868	64,878,992	5,491,942	16,055,467	333,967,290

*Approximate figures. † Flour estimated.
‡The stocks in Duluth, excepting of wheat, were not obtainable.

CROPS FOR 1884.

Preliminary (December) estimate of the United States Agricultural Department.

States and Territories.	Wheat.		Corn.		Oats.	
	Bushels.	Value.	Bushels.	Value.	Bushels.	Value.
Illinois	32,374,000	$20,395,620	244,544,000	$75,808,640	98,153,000	$22,575,190
Wisconsin	20,083,000	12,049,800	26,200,000	8,908,000	45,940,000	11,025,600
Minnesota	41,307,000	20,653,500	23,630,000	7,797,900	36,100,000	7,220,000
Iowa	31,270,000	17,198,500	252,600,000	58,098,000	78,650,000	15,730,000
Missouri	27,500,000	17,050,000	197,850,000	51,441,000	30,774,000	7,693,500
Kansas	34,990,000	15,745,500	168,500,000	37,070,000	27,419,000	6,032,180
Nebraska	28,325,000	11,896,500	122,100,000	21,978,000	21,844,000	4,150,360
Dakota	22,330,000	10,271,800	13,950,000	4,185,000	11,812,000	2,716,760
Montana	1,372,000	960,400	20,700	15,525	1,740,000	609,000

***Statement** of number of canal-boats running, of miles run, of clearances issued, and of tons transported on the Illinois and Michigan Canal during twenty-five years, viz, from* 1860 *to* 1884, *inclusive.*

[Report Chicago Board of Trade, 1884.]

Date.	Clearances issued.	Boats running.	Miles run.	Tons. transported.	Date.	Clearances issued.	Boats running.	Miles run.	Tons transported.
1860	3,926	201	235,684	367,437	1873	*4,743	272	328,174	849,533
1861	6,339	194	415,599	547,295	1874	*4,296	152	288,075	712,020
1862	7,014	211	474,976	673,590	1875	*3,554	142	259,878	676,025
1863	5,810	240	418,713	619,599	1876	*4,049	145	302,024	691,943
1864	4,527	228	300,340	510,286	1877	*4,008	145	272,788	605,912
1865	3,907	228	360,614	616,140	1878	*4,299	140	293,335	598,792
1866	5,488	230	406,784	746,815	1879	*4,458	136	304,191	669,459
1867	4,183	209	357,623	746,954	1880	*4,536	133	320,009	751,360
1868	4,128	218	345,169	737,827	1881	*4,459	133	316,435	826,133
1869	4,524	219	385,050	871,738	1882	*4,055	132	335,710	1,011,287
1870	3,903	179	242,650	585,870	1883	*3,789	132	306,618	925,575
1871	3,523	186	278,948	629,975	1884	*4,204	†134	325,431	956,721
1872	*5,018	173	334,820	783,641					

* Includes clearances at Henry, and Copperas Creek.
† Of this number twenty-seven are steam canal-boats and eight are tugs.

***Consolidated statement** showing the entire movement of flour and grain at Chicago* during* 1884.

[Report Chicago Board of Trade, 1884.]

RECEIPTS.

Received by—	Flour.	Wheat.	Corn.	Oats.	Rye.	Barley.
	Barrels.	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*
Lake	26,330	21,600	1,218	200	.....	300
Illinois and Michigan Canal	89,466	7,559	1,157,247	693,895	40,775	.....
Chicago and Northwestern Railway	1,457,637	5,995,368	4,764,634	6,962,218	391,478	2,876,259
Illinois Central Railroad	12,971	1,203,915	3,337,120	4,839,967	237,723	187,359
Chicago, Rock Island and Pacific Railroad	698,259	1,887,726	6,474,421	6,273,137	548,136	242,576
Chicago, Burlington and Quincy Railroad	237,837	6,426,078	31,245,530	10,775,620	1,344,617	1,630,269
Chicago, Alton and Saint Louis Railroad	118,245	2,383,989	4,080,075	1,193,897	44,016	3,347
Chicago and Eastern Illinois Railroad	12,335	233,334	679,660	474,896	16,104	10,870
Chicago, Milwaukee and Saint Paul Railway	2,086,876	5,311,699	1,611,650	7,402,257	371,112	2,567,639
Wabash, Saint Louis and Pacific Railway	165,946	2,794,387	6,132,839	1,454,739	330,580	171,116
Louisville, New Albany and Chicago Railroad	1,650	20,747	792	2,615	2,499	.....
Michigan Central Railroad	6,799	9,662	33,361	.....	.....	3,751
Lake Shore and Michigan Southern Railway	44,882	40,680	11,954	692	.....	3,619
Pittsburgh, Fort Wayne and Chicago Railway	.....	.....	2,654	125	.....	.....
Chicago, Saint Louis and Pittsburgh Railway	.....	1,956	5,903	1,960	.....	.....
Baltimore and Ohio Railroad	.....	1,333	.....	.....	.....	.....
Chicago and Grand Trunk Railway	1,117	57,494	7,837	4,416	.....	152,724
New York, Chicago and Saint Louis Railroad	480	51	33,050	328	.....	.....
Chicago and Atlantic Railroad	.....	.....	500	1,400	476	.....
Total receipts	4,960,830	26,397,587	59,580,445	40,082,362	3,327,516	7,849,829
Flour manufactured in the city	535,841	.....	.....	.....	.....	.....
In store and in vessels December 31, 1883	62,427	11,891,615	2,660,984	1,481,417	1,590,772	365,354
Totals	5,559,098	38,289,202	62,241,429	41,563,779	4,918,288	8,215,183

* Shipments originating in Milwaukee and passing through Chicago not included.

Consolidated statement showing the entire movement of flour and grain, &c.—Continued.

SHIPMENTS.

Shipped by—	Flour.	Wheat.	Corn.	Oats.	Rye.	Barley.
Lake—	*Barrels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*
To Buffalo. April	525	519,412	986,758	163,853	47,100	.....
May	47,418	922,001	2,235,824	564,340	496,882	.....
June	64,366	1,772,471	1,961,937	373,725	193,015	.....
July	107,707	1,396,123	1,844,764	631,715	120,603	.....
August	90,926	1,485,247	2,798,311	190,452	349,858	.....
September	79,865	1,415,649	3,300,067	536,046	589,723	.....
October	95,935	413,101	2,543,569	623,226	299,200	16,506
November	90,259	423,783	1,932,752	164,500	241,598	.....
Total to Buffalo	577,001	8,347,787	17,603,982	3,307,857	2,337,979	16,506
To Erie	126,818	1,213,990	1,015,932	41,048	181,829	.....
To Oswego	200	84,344	235,954	.....	.....	.....
To Ogdensburg	1,285	.....	1,959,688	690,265	.....	.....
To other American ports	31,096	1,126,420	1,746,378	648,103	32,100	.....
To Canadian ports in transit to American points, viz:						
Collingwood	.....	.....	486,679	465,145	.....	.....
Point Edwards	.....	.....	274,095	.....	.....	.....
Sarnia	.....	.....	74,443	.....	.....	.....
Midland	.....	.....	854,725	252,471	.....	.....
Exported to Canada—						
To Montreal	13,607	77,548	279,896	.....	.....	.....
To Kingston	2,700	607,566	1,111,948	40,000	.....	.....
To other Canadian ports	650	61,229	1,717,204	.....	.....	.....
Total by lake	753,357	11,518,884	27,360,924	5,444,889	2,551,908	16,506
Illinois and Michigan Canal	180	910,122	10,806	54,724	2,553	.....
Chicago and Northwestern Railway	37,384	624,601	350,987	75,511	11,199	285,630
Illinois Central Railroad	34,459	218,670	342,087	540,345	47,666	381,473
Chicago, Rock Island and Pacific Railroad	11,174	66,455	70,000	41,200	91,000	155,510
Chicago, Burlington and Quincy Railroad	2,504	89,471	168,068	7,602	3,694	61,376
Chicago, Alton and Saint Louis Railroad	12,596	540,979	28,673	17,586	1,070	195,185
Chicago and Eastern Illinois Railroad	10,920	285,111	214,222	249,654	8,098	173,372
Chicago, Milwaukee and Saint Paul Railway	15,734	469,791	101,766	18,465	14,609	90,843
Wabash, Saint Louis and Pacific Railway	68,206	392,015	569,398	568,038	4,783	171,252
Louisville, New Albany and Chicago Railroad	9,840	2,578	389,818	144,160	43,303	256,501
Michigan Central Railroad	675,713	878,326	4,217,585	3,633,779	89,266	374,607
Lake Shore and Michigan Southern Railway	1,062,008	761,069	3,974,544	4,516,101	130,327	300,313
Pittsburg, Fort Wayne and Chicago Railway	509,031	494,340	2,046,877	3,845,202	386,599	452,221
Chicago, Saint Louis and Pittsburgh Railway	342,611	527,847	1,465,790	1,365,522	159,213	579,519
Baltimore and Ohio Railroad	122,750	377,515	1,468,048	2,841,604	98,852	134,950
Chicago and Grand Trunk Railway	304,500	1,124,164	3,982,564	2,111,025	24,893	115,394
New York, Chicago and Saint Louis Railroad	228,560	839,411	3,860,140	4,208,984	259,286	143,710
Chicago and Atlantic Railroad	607,357	925,228	2,551,753	4,545,902	438,438	207,738
Total shipments	4,808,884	21,046,577	53,274,050	34,230,293	4,365,757	4,095,500
In store and in vessels December 31, 1884	58,628	13,800,256	1,824,755	486,792	101,249	111,154
City consumption and unaccounted for	691,586	3,442,369	7,142,624	6,846,694	451,282	4,008,529
Totals	5,559,098	38,289,202	62,241,429	41,563,779	4,918,288	8,215,183

Receipts and shipments of wool and hides during the year 1884, *by routes.*

[Report Chicago Board of Trade, 1884.]

Routes received and shipped by—	Wool.		Hides.	
	Received.	Shipped.	Received.	Shipped.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*
Lake	149, 600	2, 831, 750	1, 271, 550	1, 635, 020
Illinois and Michigan Canal	.....	.....	.....	.....
Chicago and Northwestern Railway	8, 553, 464	291, 891	17, 219, 456	7, 284, 285
Illinois Central Railroad	671, 382	108, 670	5, 011, 371	2, 148, 932
Chicago, Rock Island and Pacific Railroad	6, 859, 966	76, 690	11, 213, 389	.....
Chicago, Burlington and Quincy Railroad	9, 641, 231	24, 623	10, 707, 480	.....
Chicago, Alton and Saint Louis Railroad	6, 901, 820	215, 750	11, 474, 050	575, 418
Chicago and Eastern Illinois Railroad	.....	31, 318	63, 950	49, 000
Chicago, Milwaukee and Saint Paul Railway	4, 372, 495	451, 172	5, 584, 840	4, 351, 730
Wabash, Saint Louis and Pacific Railway	4, 727, 851	1, 713, 585	4, 112, 548	870, 715
Louisville, New Albany and Chicago Railroad	10, 015	288, 180	115, 817	1, 405, 900
Michigan Central Railroad	214	18, 542, 328	1, 758, 415	12, 442, 358
Lake Shore and Michigan Southern Railway	57, 908	3, 056, 254	761, 768	17, 863, 179
Pittsburgh, Fort Wayne and Chicago Railway	26, 540	5, 767, 650	193, 663	18, 491, 660
Chicago, Saint Louis and Pittsburgh Railway	.....	113, 285	.....	2, 175, 468
Baltimore and Ohio Railroad	.....	602, 048	.....	12, 148, 057
Chicago and Grand Trunk Railway	16, 200	11, 250, 025	788, 827	14, 622, 455
New York, Chicago and Saint Louis Railroad	4, 615	3, 641, 946	168, 655	8, 022, 012
Chicago and Atlantic Railroad	16, 000	4, 527, 761	.....	4, 073, 517
Totals	42, 009, 301	53, 534, 926	70, 445, 779	108, 159, 696

Receipts and shipments of coal during the year 1884, *by routes.*

[Report Chicago Board of Trade, 1884.]

Routes received and shipped by—	Received.	Shipped.
	Tons.	*Tons.*
Lake	1, 032, 551	1, 492
Illinois and Michigan Canal	1, 291	3, 174
Chicago and Northwestern Railway	221	442, 209
Illinois Central Railroad	41, 690	50, 011
Chicago, Rock Island and Pacific Railroad	16, 783	31, 909
Chicago, Burlington and Quincy Railroad	85, 084	141, 973
Chicago, Alton and Saint Louis Railroad	821, 918	6, 557
Chicago and Eastern Illinois Railroad	355, 902	3, 436
Chicago, Milwaukee and Saint Paul Railway	27, 528	266, 077
Wabash, Saint Louis and Pacific Railway	94, 947	7, 964
Louisville, New Albany and Chicago Railraod	99, 579	755
Michigan Central Railroad	118, 765	358
Lake Shore and Michigan Southern Railway	178, 146	4, 079
Pittsburgh, Fort Wayne and Chicago Railway	53, 843	722
Chicago, Saint Louis and Pittsburgh Railway	369, 448	660
Baltimore and Ohio Railroad	193, 840	98
Chicago and Grand Trunk Railway	34, 301	471
New York, Chicago and Saint Louis Railroad	211, 489	767
Chicago and Atlantic Railroad	105, 470	465
Totals	3, 842, 796	963, 177

LUMBER STATISTICS.

The stocks on hand in this city at the close of each of the years named below were reported as follows:

[Report Chicago Board of Trade, 1884.]

Articles.	Dec. 31, 1884.	Dec. 31, 1883.	Dec. 31, 1882.	Dec. 31, 1881.
Sawed pine lumber and timber.....feet..	623, 910, 097	635, 348, 561	655, 013, 520	560, 416, 842
Shingles .....number..	332, 533, 611	461, 930, 496	299, 946, 350	260, 906, 494
Lath .....do....	88, 160, 599	65, 981, 140	76, 361, 002	48, 820, 438
Pickets .....do...	2, 528, 738	1, 529, 287	3, 093, 990	3, 784, 178
Cedar posts .....do....	397, 825	397, 832	78, 034	219, 012

Receipts and shipments of lumber and shingles, 1884.

Routes received and shipped by—	Lumber.		Shingles.	
	Received.	Shipped.	Received.	Shipped.
	M feet.	*M feet.*	*M.*	*M.*
Lake	1,610,166	506	885,091	20
Illinois and Michigan Canal	22	31,044	.....	15,239
Chicago and Northwestern Railway	8,890	68,953	7,846	2,526
Illinois Central Railroad	17,794	62,820	.....	3,165
Chicago, Rock Island and Pacific Railroad	6,377	70,850	.....	7,529
Chicago, Burlington and Quincy Railroad	5,376	318,820	291	14,390
Chicago and Alton Railroad	1,895	133,971	.....	2,986
Chicago and Eastern Illinois Railroad	28,444	41,757	80	2,414
Chicago, Milwaukee and Saint Paul Railway	15,038	44,653	5,921	4,647
Wabash, Saint Louis and Pacific Railway	29,937	113,247	258	6,668
Louisville, New Albany and Chicago Railroad	9,697	5,529	.....	633
Michigan Central Railroad	22,909	2,767	5,321	619
Lake Shore and Michigan Southern Railway	12,399	6,346	183	252
Pittsburgh, Fort Wayne and Chicago Railway	13,256	5,301	2,664	912
Chicago, Saint Louis and Pittsburgh Railway	18,060	17,923	.....	1,995
Baltimore and Ohio Railroad	490	2,998	.....	.....
Chicago and Grand Trunk Railway	7,100	6,141	12,051	.....
New York, Chicago and Saint Louis Railroad	10,920	4,670	.....	80
Chicago and Atlantic Railroad	3,645	2,551	.....	181
Totals	1,822,315	940,147	919,706	64,256

GRAIN FREIGHTS BY LAKE AND ERIE CANAL.

The following were the current rates per bushel of freight on wheat and corn from Chicago to Buffalo, Oswego, or Kingston (sail), and to Montreal (steam), also to New York by lake and Erie Canal, for each week during the season of navigation in 1884:

[Report Chicago Board of Trade, 1884.]

Week ended—	To Buffalo.		To Oswego or Kingston.		To Montreal (steam).		Erie Canal, Buffalo to New York.		Chicago to New York, lake and canal (including Buffalo).	
	Wheat.	Corn.	Wheat.	Corn.	Wheat.	Corn.	Wheat.	Corn.	Wheat.	Corn.
	Cents.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
Apr. 5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
19	3	2⅝	.....	.....	.....	.....	.....	.....	.....	.....
26	2¾	2½	.....	.....	.....	.....	.....	.....	.....	.....
May 3	2½	2	.....	.....	.....	.....	5⅛	4⅝	7⅛	6⅝
10	2⅛	2	.....	.....	.....	.....	4⅝	3⅞	6½	5⅞
17	2½	2	.....	.....	.....	.....	4¼	3⅞	6¼	5⅞
24	2	1¾	.....	.....	.....	.....	.....	.....	.....	.....
31	2	1¾	.....	.....	.....	.....	.....	.....	.....	.....
June 7	1¾–2	1⅝–1⅞	.....	3⅝	.....	5⅞	.....	.....	.....	.....
14	.....	.....	.....	3⅞	.....	6⅛	.....	.....	.....	.....
21	2⅜–2½	2¼	.....	.....	.....	.....	4¼	3¾	6⅝	6
28	2¼	1⅝–2	.....	.....	.....	.....	4⅛	3⅝	6⅝	5⅝
July 5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
12	2–2¼	1⅝–1¾	3¾	.....	6⅛	.....	.....	.....	.....	.....
19	2	1¾	.....	.....	.....	.....	.....	.....	.....	.....
26	2	1¾	.....	.....	.....	.....	4⅝	4⅛	6⅝	5⅞
Aug. 2	1¾	1¾	4	.....	6¾	.....	4⅛–4¼	4⅛	6¼–6½	6
9	1¾–2	1⅝–1¾	.....	.....	.....	.....	4¾–5	4¼–4½	6½–7	5¾–6⅝
16	1¾–2	1⅝–1¾	4	.....	6¾	.....	5⅛	4⅛	6⅞–7⅛	6–6¼
23	2	1⅝–1¾	.....	4	.....	6⅛	5⅛–5¼	4⅝–5¼	7⅛–7¼	6¼–7
30	1¾–2	1¾–2	.....	.....	.....	.....	5¼	5–5¼	6⅞–7¼	6¾–7¼
Sept. 6	2–3	2–2⅛	.....	.....	.....	.....	5¼	5–5¼	7¼–8¼	7–7¼
13	2–3	1¾	.....	.....	.....	.....	.....	.....	.....	.....
20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
27	1¾	1⅛	.....	.....	.....	.....	5⅛	4¾–5	7¼	6¼–6⅛
Oct. 4	1¾	1⅛	.....	.....	.....	.....	.....	.....	.....	.....
11	1¾	1⅛	.....	.....	.....	.....	.....	.....	.....	.....
18	1¾	1⅛	.....	.....	.....	.....	.....	.....	.....	.....
25	1¾	1⅛	.....	4¼	.....	6¾	.....	.....	.....	.....
Nov. 1	2¾–3	2¼–2⅜	.....	.....	.....	.....	.....	.....	.....	.....
8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

LAKE (STEAM) AND RAIL FREIGHTS, SEASON OF 1884.

The following shows the weekly range of freights on flour, wheat, and corn by steam, Chicago to Buffalo or Erie, and thence by rail.

[Report Chicago Board of Trade 1884.]

Week ended—	To Buffalo.			To New York.			To Boston.			To Philadelphia.			To Baltimore.		
	Flour, per barrel.	Wheat, per bushel.	Corn, per bushel.	Flour, per barrel.	Wheat, per bushel.	Corn, per bushel.	Flour, per barrel.	Wheat, per bushel.	Corn, per bushel.	Flour, per barrel.	Wheat, per bushel.	Corn, per bushel.	Flour, per barrel.	Wheat, per bushel.	Corn, per bushel.
	Cents.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cts.*
Apr. 26	20	2¾	2½	40	12	11	50	11	9	36	11	8⅞	34	10½	8⅞
May 3	20	2¾	2¼	40	12	11	50	11	9	36	11	8⅞	34	10½	8⅞
10	20	2¼	2	37½	11	9	47½	11	9	33½	10	8⅞	31½	9½	8⅞
17	20	2¼	2	37½	10	9	47	11	9	33½	9	8⅞	31½	8½	8⅞
24	20	2¼	2	37½	10	9	47	11	9	33½	9	8⅞	31½	8½	8⅞
31	20	2¼	2	37½	10	9	47	11	9	33½	9	8⅞	31½	8½	8⅞
June 7	20	2¼	2¼	37½	10	9	45	11	8¾	33½	9	8⅞	31½	8½	8⅞
14	20	2⅛	2¼	35	10	8½	45	10	8½	31	9	8⅞	29	8½	8⅞
21	20	2⅛	2¼	35	10	8½	45	10	8½	31	9	8⅞	29	8½	8⅞
28	20	2⅛	2¼	35	10	8½	45	10	9½	31	9	8⅞	29	8½	8⅞
July 5	20	2	1¾	35	10	8½	45	10	9⅜	31	9	8⅞	29	8½	8⅞
12	20	2¼	2	35	10	8½	45	10	9½	31	9	8⅞	29	8½	8⅞
19	20	2¼	2	35	10	8½	45	10	9½	31	9	8⅞	29	8½	8⅞
26	20	2¼	2	35	9	7	45	10	10	31	8	8⅞	29	7½	8⅞
Aug. 2	20	2¼	2	35	9	7	45	9½	11	31	8	8⅞	29	7½	8⅞
9	20	2⅛	2¼	35	9	8	45	12	11	31	8¼	8⅞	29	7½	8⅞
16	20	2¾	2⅛	40	10	9	50	12	11	36	9	8⅞	34	8½	8⅞
23	20	2¾	2⅛	40	10	9	50	12	11	36	9	8⅞	34	8½	8⅞
30	20	2¾	2½	40	10	9	50	12	11	36	9	8⅞	34	8½	8⅞
Sept. 6	20	2¾	2½	40	12	11	50	13	12	36	11	8⅞	34	10½	8⅞
13	20	3¼	3	40	11½	10	50	12	11	36	10⅜	8⅞	34	9⅞	8⅞
20	20	2½	2¼	40	10	9	50	11	10	36	9	8⅞	34	8½	8⅞
27	20	2¼	2¼	35	9	8	45	10	9	31	8	8⅞	29	7½	8⅞
Oct. 4	20	2	2	35	9	7 8/10	45	10	9	31	8	8⅞	29	7½	8⅞
11	20	2¼	1½	35	9	8	45	10	9⅛	31	8	8⅞	29	7½	8⅞
18	20	2	1½	35	9	8	45	10	9	31	8	8⅞	29	7½	8⅞
25	20	2¼	2	35	10	8¼	45	9⅞	9¼	31	9	8⅞	29	8½	8⅞
Nov. 1	20	3	2¾	40	11	10	50	11	9¾	36	10	8⅞	34	9½	8⅞
8	20	2½	2¼	40	9	8½	50	10	8¾	36	8	8⅞	34	7½	8⅞
15	20	2½	2¼	40	9	8½	50	9¼	8	36	8	8⅞	34	7½	8⅞
22	20	2¼	2	40	9	8½	50	9½	12	36	8	8⅞	34	7½	8⅞
29	20	2¼	4	40	9	8½	50	9½	12	36	8	8⅞	34	7½	8⅞

ALL-RAIL FREIGHTS EASTWARD.

The following were the published tariff rates for freight on the commodities named, from Chicago by all rail to the several points indicated, in car-load lots:

[Report Chicago Board of Trade, 1884.]

From Chicago to the points named below.	January 1 to January 4.			January 5 to January 13.			January 14 to March 13.			March 14 to March 21.		
	Flour, per barrel.	Grain, per 100 pounds.	Provisions, per 100 pounds.	Flour, per barrel.	Grain, per 100 pounds.	Provisions, per 100 pounds.	Flour, per barrel.	Grain, per 100 pounds.	Provisions, per 100 pounds.	Flour, per barrel.	Grain, per 100 pounds.	Provisions, per 100 pounds.
	Cents.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
New York, N. Y	60	30	35	40	20	25	60	30	35	40	20	25
Philadelphia, Pa	56	28	33	36	18	23	56	28	33	36	18	23
Baltimore, Md	54	27	32	34	17	22	54	27	32	34	17	22
Boston, Mass	70	35	40	50	25	30	70	35	40	50	25	30
Hartford, Conn	70	35	40	50	25	30	70	35	40	50	25	30
Providence, R. I	70	35	40	50	25	30	70	35	40	50	25	30
Portland, Me	70	35	40	50	25	30	70	35	40	50	25	30
Montreal, Canada	56	28	33	36	18	23	56	28	33	36	18	23
Prescott, Canada	56	28	33	36	18	23	56	28	33	36	18	23
Kingston, Canada	54	27	30	54	27	30	54	27	30	54	27	30
Toronto, Canada	35	17½	20	25	12½	15	35	17½	20	25	12½	15
Suspension Bridge, N. Y.	35	17½	20	25	12½	15	35	17½	20	25	12½	15
Buffalo, N. Y	35	17½	20	25	12½	15	35	17½	20	25	12½	15
Albany and Troy, N. Y	56	28	30	40	20	20	56	28	30	40	20	20
Pittsburgh, Pa	35	17½	20	25	12½	15	35	17½	20	25	12½	15
Wheeling, W. Va	35	17½	20	25	12½	15	35	17½	20	25	12½	15
Bellaire, Ohio	35	17½	20	25	12½	15	35	17½	20	25	12½	15
Harrisburg, Pa	56	28	33	36	18	23	56	28	33	36	18	23
Scranton, Pa	66	33	38	46	23	28	66	33	38	46	23	28
Wilmington, Del	56	28	33	36	18	23	56	28	33	36	18	23
Washington, D. C	54	27	32	34	17	22	54	27	32	34	17	22
Alexandria, Va	54	27	32	34	17	22	54	27	32	34	17	22

From Chicago to the points named below.	March 22 to April 9.			April 10 to June 23.			June 24 to July 20.			July 21 to December 31.		
	Flour, per barrel.	Grain, per 100 pounds.	Provisions, per 100 pounds.	Flour, per barrel.	Grain, per 100 pounds.	Provisions, per 100 pounds.	Flour, per barrel.	Grain, per 100 pounds.	Provisions, per 100 pounds.	Flour, per barrel.	Grain, per 100 pounds.	Provisions, per 100 pounds.
	Cents.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
New York, N. Y	30	15	20	30	15	20	40	20	25	50	25	30
Philadelphia, Pa	26	13	18	26	13	18	36	18	23	46	23	28
Baltimore, Md	24	12	17	24	12	17	34	17	22	44	22	27
Boston, Mass	40	20	25	40	20	25	50	25	30	60	30	35
Hartford, Conn	40	20	25	40	20	25	50	25	30	60	30	35
Providence, R. I	40	20	25	40	20	25	50	25	30	60	30	35
Portland, Conn	40	20	25	40	20	25	50	25	30	60	30	35
Montreal, Canada	26	13	18	26	13	18	36	18	23	46	23	28
Prescott, Canada	26	13	18	26	13	18	36	18	23	46	23	28
Kingston, Canada	26	13	18	26	13	18	40	20	20	40	20	25
Toronto, Canada	20	10	12½	25	12½	15	25	12½	15	30	15	17½
Suspension Bridge, N. Y	20	10	12½	20	10	12½	25	12½	15	30	15	17½
Buffalo, N. Y	20	10	12½	20	10	12½	25	12½	15	30	15	17½
Albany and Troy, N. Y	30	15	15	30	15	15	40	20	24	48	24	28
Pittsburgh, Pa	20	10	12½	20	10	12½	25	12½	15	30	15	17½
Wheeling, W. Va	20	10	12½	20	10	12½	25	12½	15	30	15	17½
Bellaire, Ohio	20	10	12½	20	10	12½	25	12½	15	30	15	17½
Harrisburg, Pa	26	13	18	26	13	18	36	18	23	46	23	28
Scranton, Pa	36	18	23	36	18	23	46	23	28	56	28	33
Wilmington, Del	26	13	18	26	13	18	36	18	23	46	23	28
Washington, D. C	24	12	17	24	12	17	34	17	22	44	22	27
Alexandria, Va	24	12	17	24	12	17	34	17	22	44	22	27

FOREIGN FREIGHT RATES.

The following shows the through rates of freight (in cents per 100 pounds) monthly, on flour and provisions charged in 1884, from Chicago to points named, shipments being all rail to seaboard, and thence by steamer.

[Report Chicago Board of Trade, 1884.]

Ports shipped to—	Goods.	January.	February.	March.	April.	May.	June.
Liverpool	Grain	40.500	40.500	40.500	40.50	40.500	40.500
Do	Sacked flour	23.500	23.500	23.500	23.50	23.500	25.940
Do	Provisions	44.060	57.500	57.500	26.75	26.750	31.250
Glasgow	Grain	27.880	27.880	25.250	22.25	25.250	27.500
Do	Sacked flour	36.880	41.880	36.880	36.88	38.690	37.500
Do	Provisions	47.500	52.500	47.500	46.88	49.690	45.500
London	Grain	28.000	28.000	27.000	26.00	26.000	29.000
Do	Sacked flour	36.880	41.880	39.690	39.69	38.690	37.500
Do	Provisions	47.500	50.310	47.500	47.50	50.310	50.310
Antwerp	....do	58.130	63.130	55.375	46.72	46.720	42.500
Hamburg	....do	49.690	49.690	55.310	55.31	58.130	46.000
Amsterdam	....do	49.690	49.690	55.310	55.31	58.130	46.000
Rotterdam	....do	45.000	45.000	45.000	45.00	45.000	42.500
Copenhagen	....do	49.690	49.690	55.310	55.31	58.130	46.000
Stockholm	....do	60.000	60.000	60.000	65.00	65.000	65.000
Stettin	....do	49.690	49.690	45.000	55.31	58.130	55.310
Bordeaux	....do	53.125	53.125	55.250	55.25	58.125	58.125

Ports shipped to—	Goods.	July.	August.	September.	October.	November.	December.
Liverpool	Grain	47.50	51.09	46.87	34.06	53.500	55.31
Do	Sacked flour	35.47	40.47	30.87	28.75	39.690	39.69
Do	Provisions	47.50	51.09	48.28	48.28	58.125	63.75
Glasgow	Grain	23.50	22.62	22.62	22.62	27.500	44.00
Do	Sacked flour	32.62	36.88	36.88	36.88	37.500	41.88
Do	Provisions	41.88	44.69	44.69	44.69	53.130	56.00
London	Grain	26.00	25.00	25.00	25.00	29.000	40.00
Do	Sacked flour	35.31	36.88	36.88	36.88	36.880	41.88
Do	Provisions	47.50	47.50	47.50	47.50	50.310	53.13
Antwerp	....do	50.00	52.50	52.50	52.50	60.940	63.75
Hamburg	....do	55.00	55.00	55.00	55.00	58.000	60.00
Amsterdam	....do	55.00	55.00	55.00	55.00	58.000	60.00
Rotterdam	....do	42.50	42.50	42.50	42.50	42.500	42.50
Copenhagen	....do	55.00	55.00	55.00	55.00	58.600	60.00
Stockholm	....do	60.00	58.00	58.00	58.00	60.000	60.00
Stettin	....do	55.31	55.31	55.31	55.31	58.130	58.13
Bordeaux	....do	55.25	55.25	55.25	55.25	58.125	60.25

RAILROAD FREIGHT RATES FROM SAINT PAUL AND MINNEAPOLIS TO CHICAGO.

From the most reliable source of information at my command, I have ascertained that the railroad rates from Saint Paul and Minneapolis to Chicago, during the year 1885, ranged from 20 to 17½ cents per 100 pounds.

The present (February 1, 1886) open rate is 17½ cents, but most of the business is done at about 12½ cents on what are called transit rates.

BRIEF OF POINTS IN FAVOR OF THE WATERTOWN LINE OF PROPOSED HENNEPIN CANAL, BY MR. EUGENE LEWIS.

MOLINE, ILL., *February* 19, 1886.

DEAR SIR: In pursuance of a suggestion made by me and approved by you at our interview at your office January 28 last, I give you a brief statement of some of the reasons why the Watertown line of the Hennepin Canal is a more advantageous route, when looked at with reference to the Rock Island Arsenal, than either of the other lines surveyed, viz, the Marais d'Osier (Meredosia) or the Rock Island lines, as well as reasons why it is to be preferred as a commercial canal.

The Watertown and Meredosia lines are practically of equal length to the margin or shore of the Mississippi, the surveys of 1882 making the Meredosia 64.1 miles and

the Watertown 64¼ miles. (The extra mile in the Watertown line to reach the channels is a question of cost simply.) The resurvey of 1885 makes the length of the Watertown 64.5 miles, of the Rock Island line about 78.5 miles. This line is about 3 miles longer than the Rock Island line of 1882, but is cheaper, much easier maintained, and better in every way, except length, than the line surveyed in 1882, so that the distance from Chicago to the Mississippi by the Meredosia line and the Illinois and Michigan Canal is 160.1 miles, by the Watertown 160.5 miles, and by the Rock Island 174.5 miles.

The Meredosia line enters the river just about 25 miles above the head of Rock Island and about 26.5 miles from the Rock Island Arsenal; the Watertown about 4 miles above the head of the island and about 5.5 miles above the arsenal; while the Rock Island line enters the river about 6 miles below the head of Rock Island and about 8 miles from the arsenal, if, as I assume, in landing stores and shipping from the arsenal it would be best to have the landing in deep still water near the arsenal. Thus the distance from the Great Lakes at Chicago to the Rock Island Arsenal would be approximately as follows: Via the Meredosia line 160.1 plus 26.5 miles, equal to 186.6 miles; via the Watertown line 160.5 plus 5.5, equal to 166 miles; via the Rock Island 174.5 miles plus 8 miles, equal to 182.5 miles.

So that on the single question of distance from the lakes to the arsenal the Watertown line is about 16 miles shorter than the Rock Island, and 21 miles shorter than the Meredosia.

The pool, so called, of the Government water-power, which is about 1.5 miles long lying between the upper end of the island and the city of Moline, and terminating near the arsenal and armory, must, for obvious reasons, be regarded as the harbor for the arsenal. No better harbor could be devised and constructed than this pool forms, as it has already been constructed by the United States Government.

Along the northern or Iowa shore of the island are a succession of rapids for almost the whole length, while along the lower or west end of the island, and the southern or Illinois shore, the water below the dam forming the pool is shallow and full of bars, while along the shore of the pool we have dead water close inshore for 1½ miles of a depth, at lowest stage, of from 5 to 8 or 10 feet, with a protected harbor large enough to shelter, at one and the same time, all the crafts plying on the river from its headwaters to Saint Louis without crowding, and with an entrance at the lowest stages of water from the channel of at least 5 feet.

Another advantage, and a great one, is this, that the experience of the last sixteen years, since the present dam was constructed by the Government, shows that the ice in this pool or harbor is so strong and so anchored to the shore that it never goes or moves out, but melts in the pool without damage to any craft anchored there, while several times within the time an ice gorge at Credit Island, about 1 mile below the Government bridge to Davenport, has piled the so-called Rock Island Harbor with great cakes of ice 2 feet in thickness, to a depth of from 10 to 15 feet, with the effect to utterly demolish and destroy anything in the shape of river craft lying there.

To reach this harbor from the Watertown line, boats coming from the lakes would be towed into the pool by floating them down the river for 3 or 4 miles with a fall of about 1 foot to the mile. Of course boats leaving the island for the lakes must be towed up-stream against this fall of about 1 foot to the mile for 4 miles. If a tugboat was kept at the island for the purpose of towing boats from the canal to the pool, the distance is such that a system of signals could be easily established for signaling the arrival of boats, &c.

How would it be with the Meredosia line? Freight for the arsenal would be obliged to descend 25 miles, with a fall of 11.669 feet in the last 10.5 miles, to reach the harbor, while freight from the arsenal to Chicago must be towed this 25 miles of swift water with a rise of 11.669 feet in the first 10.5 miles.

It is true that at the entrance of the canal by the Watertown line your boat lies 11 feet lower than at the entrance of the canal by the Meredosia, requiring a lockage of 11 feet to attain to the same level. By the Rock Island line freight from the arsenal harbor to Chicago must descend the river 8.57 feet to the Davenport Government bridge, a distance of about 3.5 miles, the fall for the first 7,000 feet being nearly 5 feet (4.82 feet), and will be 15 feet lower at the terminus of the canal than at the terminus of the Watertown route.

Again, freight from Chicago for the arsenal is landed in the Mississippi about 11 feet below the pool, and to enter the pool must pass around the head of the island, making a rise against the current of the Mississippi at the head of the island of 4.82 feet in 7,000. Many a time has the writer of this seen steamboats standing still for minutes or falling back in attempting to stem this fearful current. And one of the officers in the United States Engineer's office at Rock Island, Ill., only a few days since told the writer that he had seen the staunch steamer General Barnard (a Government steamer used by the United States Engineer Corps in the improvement of the Mississippi River) stand for several minutes in the rapids at this point in attempting to ascend the river. It is only necessary to picture to one's self a little tug en-

deavoring to tow several barges at a time, laden with iron, coal, ordnance, or any other heavy material for the arsenal, against such a current to understand the immeasurable superiority of the Watertown line over the Rock Island for the purposes of the Government Arsenal, without considering for a moment the question of the additional distance of 16 or 17 miles.

This argument is all based on the hypothesis that the river would be allowed to remain as it is now, without improvement.

If, as the writer believes, the time is not far distant when the navigation will be improved at the head of Rock Island by the construction of a low dam and a lock, the advantages of the Watertown line for the purposes of the Rock Island Arsenal will be still more patent.

The objections to the Watertown line by the route surveyed in 1882 are strongly stated in the Report of the Chief of Engineers, U. S. Army, for 1882, Appendix G G, pages 1760–1761.

The first point made against the Watertown route is that the nature of the soil and surface for the west end of the route is so much more favorable by the Marais d'Osier than the Watertown line. This argument is substantially done away with by the new survey, the Watertown line of 1885 running through substantially the same kind of soil as the Marais d'Osier, and the rock excavation spoken of as found on the old line is avoided except at the entrance into the river, when it becomes a question of expense simply. The objection that a larger water supply is required for the Watertown line than the other is also entirely obviated by the new survey, since the Watertown line of 1885 crosses Rock River at Penney's Slough, high enough up to carry the water direct from Rock River into the Mississippi River, the crossing of Rock River being made by a low dam in the same manner that the Marais d'Osier line crosses it, instead of by an expensive aqueduct across Rock River, at Colona, Ill., which was contemplated by the survey of 1882.

The survey of 1885 also finds a better entrance into the Mississippi River than the one of 1882, showing much less rock excavation. The objection that the number of accessory works, as culverts, bridges, &c., on the Watertown line is also obviated by the new survey. The difference in length of the two routes, the Watertown and the Marais d'Osier, if measured to the shore line of the river, is scarcely worth mentioning, being less than one-half mile, the extra length occasioned by the channel being near the Iowa shore at this point being in reality a mere question of expense and one that goes largely to make up the difference in the estimates between the Meredosia line of 1882 and the Watertown line of 1885.

The advantage of the Marais d'Osier over the Watertown line for business between Saint Paul and the lakes is conceded. On the other hand the advantage in point of distance to the arsenal and all points below Watertown, to say nothing of the immense advantage to the arsenal, are equally apparent.

The matter resolves itself into this question, Will it be more difficult to float the products of the upper river from Saint Paul to Watertown, down from the terminus of the Marais d'Osier line, 21 miles, to the Watertown terminus, or to stem the rapid running river for 21 miles with products from Burlington, Muscatine, Davenport, Rock Island, the National Arsenal, and Moline? It will be remembered that the great corn belt of the Northwest lies rather below the point where the Meredosia strikes the Mississippi.

Again, the greater part of the freights by canal from points between Saint Paul and Watertown are toward Chicago. It is considered a fair statement that Moline alone brings 25,000 tons of freight annually from Chicago in the shape of iron, steel, coal, grindstones, and building materials. The same is true to greater or less extent of all the towns along the river from Watertown to Keokuk. They would, with low cost of transportation, ship great quantities of such material by canal.

The objection that the Watertown line ends where rock excavation is required is an objection principally on the score of increased expense. The estimates made upon the survey of 1885 show that the Watertown line will cost a little less than $500,000 more than the Marais d'Osier, and as the whole expense, including the feeder of the canal, is a matter of some $6,000,000, and including the line to Chicago of some $8,000,000 to $9,000,000, this difference of less than $500,000 would hardly be considered, unless the canal subserves a better purpose by one route than by another, since there is a difference of only from 5 to 7 per cent. in the cost of the canal, probably, by the two routes. On any route having manifest advantages over any other route the additional cost of from 5 to 7 per cent. would not be long considered. It must be remembered that the Government arsenal at Rock Island has been built up to its present condition at an expense of a number of millions, and that when completed it will constitute the largest armory and arsenal in the world. That in case of war, when there would be a great demand for arms, 15,000 men could be employed to advantage at this arsenal; and the quantity of material in the way of iron, steel, coal, and other materials would be enormous, and call for all possible facilities for transportation.

It is computed, I believe, after the armory is fully completed and furnished with machinery, arms and equipments for 100,000 men can be manufactured monthly, besides large quantities of ammunition and stores.

It would be a matter of great importance to the Government at such a time to have unlimited control of a water-way capable of transporting enormous quantities of war material. It would also be very important to the Government to be able to load and unload barges in the deep, still water at the very doors of the arsenal. The pool, as now constructed, if wharves were built in the pool, supported, perhaps, upon iron piers, answers all these conditions, since a few days would suffice in which to prolong the railroad tracks down to the water's edge, and, if need be, directly upon boats or barges.

And at such a time it would make a vast difference whether the Government was obliged to tow barges 4 miles to reach the entrance of the canal, as at Watertown, or 25 miles to reach the mouth of the Meredosia line.

As was suggested in a former brief, the objection that the Watertown line enters the river upon the rapids might very likely be entirely obviated by building a low dam at the head of Rock Island, with locks to the river below.

Such a dam would of course be built with a log-way for rafts to pass through, and boats would frequently go down the river through this raft-way except in low water.

It is true that a large part of the river business of to-day is the rafting of logs and lumber, but it must be plain to any one conversant with the condition of things upon the Upper Mississippi and its tributaries, that this business of rafting logs must soon gradually diminish. The day is not far distant when there will be no logs in the immediate vicinity of the river and its tributaries. The pine then left standing in Northern Minnesota and Wisconsin will be a long distance from the facilities of floating it down the river, so that of necessity railroads, probably cheap narrow-gauge roads, must be built for moving the logs to the streams before or after they are manufactured into lumber. As the lumber becomes more scarce, and economy in the manufacture and use of lumber begins to be more practiced, the lumber will be very likely to be manufactured near the place where the trees stand.

The fact that when you reach Clinton, Iowa, you reach a country supplied with a great abundance of cheap coal must necessarily prevent very much account being taken of waste in manufacturing the lumber at any point below that point.

As you go up the river from Clinton to Saint Paul and Minneapolis you reach a country scantily supplied with fuel. Saint Paul and Minneapolis to-day are consuming large amounts of coal from Pennsylvania, and if the Hennepin Canal should be built, will consume an annually increasing amount, not only of Pennsylvania coal, but of Illinois and Indiana coal, since the canal passes immediately through the great coal-fields of La Salle, Ill. As lumber becomes more valued, and is manufactured with greater care, it will be more economical to ship the lumber in barges rather than in rafts, and that in the near future. This will be especially true if part of the freighting be done by rail, when the difference in weight between green and partially seasoned lumber will be a consideration.

It is sometimes claimed that lumber rafted from the upper river to the southern part of Iowa suffers an aggregate damage of $1 per thousand by the action of water upon it, and by its becoming gritty from the fine river sand which is found in the river. In addition to this the fastening together of the lumber in rafts is a wasteful process.

A great advantage would be secured by shipping lumber by barges over the Rock Island Rapids by means of a dam and locks instead of running it down the river, for the reason that most of the dangers of navigation would be overcome. On the whole, there would be no loss in point of time, since boats having a heavy load prefer not to take the risk of passing the rapids at night, except in the most favorable stages of water. With dam and locks they would pass in the night as well as in the daytime.

I do not speak of the dam at the head of the island as in any sense indispensable in case the Watertown line for the canal should be adopted. It would be equally advantageous to navigation whichever line was adopted. I only suggest that this might be taken into consideration, believing that the time must come when some such plan will be adopted, and if that should ever be the case then any objection to the Watertown line as compared to the other lines falls to the ground, except the slight additional expense over the cost of the Marais d'Osier line. If it be objected that the Watertown line enters the river with only 4 feet of water at the very lowest stages of the river, it must be remembered that wherever you enter the river you cannot at the lowest stages of water pass from Burlington to Dubuque, Iowa, without encountering less than 4 feet of water in the channel both above and below Watertown.

I have probably gone into this matter at too great a length, since, as you stated at our interview, the opinion of Colonel Flagler, commandant of the arsenal, will be called for, and what I have stated in a desultory and general way in regard to the

MAP

SHOWING DIFFERENT ROUTES

FOR THE

HENNEPIN CANAL

SURVEYED UNDER THE DIRECTION OF

MAJOR W.H.H.BENYAURD. Corps of Engrs

H.B.HERR. Assistant Engineer

1882

G.A.M.LILJENCRANTZ. Ass't. Engr.

1885

Scale. 1 ¾ ½ 0 1 2 3 4 5 6 7 8 9 10 miles

R.3 E. R.4 E. R.5 E. R.6 E. R.7 E. R.8 E. R.9 E. R.10 E. R.11 E.

T.22 N. T.21 N. T.20 N. T.19 N. T.18 N. T.17 N. T.16 N.

R.2 W. R.1 W. R.1 E. R.2 E. R.3 E. R.4 E.

LYONS · CLINTON · FULTON · ALBANY · MORRISON · ROUND GROVE · STERLING · ROCK FALLS · WOOSUNG · GRAND DE TOUR · DIXON · NELSON · FRANKLIN GROVE · ASHTON · AMBOY · SUBLETTE · LYNDON · PRINCETON · CORDOVA · ERIE · PROPHETSTOWN · TAMPICO · HAMPTON · PORT BYRON · LECLAIRE · RAPIDS CITY · DAVENPORT · ROCK ISLAND · MOLINE · WATERTOWN · SPRINGFIELD · DEER GROVE ST. · HENRY · NEW BEDFORD · MARSHALL · GENESEO · COLONA · OAKLEY · GREEN RIVER P.O. · DAYTON · CLEVELAND · MILAN · COAL VALLEY · ATKINSON · HENNANAWAN · MERCER · SHEFFIELD · BUREAU JUNCTION · PRINCETON · HOLLOWAYVILLE · DEPUE · HENNEPIN · HEBRON · BRIGHTON · BURLINGTON · ARLINGTON · LA MOILLE · MALDEN · DOVER · BREWERSVILLE · WYANET · POND CREEK · TISKILWA · DEPUE · BUREAU JUNCTION

WHITESIDE Co. · LEE Co. · HENRY Co. · BUREAU Co. · STARK Co.

MISSISSIPPI · ROCK ISLAND LINE · GENESEO BRANCH · MARAIS D'OSIER BRANCH · HENNEPIN CANAL ROUTE

CHICAGO ROCK ISLAND & PACIFIC RAIL ROAD · CHICAGO BURLINGTON & QUINCY R.R. · NORTH WESTERN · ILLINOIS RIVER · Illinois River

PROFILES OF THE HENNEPIN CANAL ROUTES

Horizontal Scale
1 inch to 3 miles

Vertical Scale
1 inch to 50 feet

MARAIS D'OSIER LINE

WATERTOWN LINE VIA GREEN RIVER

ROCK ISLAND LINE VIA GREEN RIVER

WATERTOWN LINE VIA PENNEY'S SLOUGH

ROCK ISLAND LINE VIA PENNEY'S SLOUGH AND ROCK RIVER

Deetum Plane

U.S. Engrs Office
Chicago Ills Feby 10. 1886.
Sent to the Chief of Engineers U.S. Army
with report of this date.
Thos. H. Handbury.
Major Corps of Engrs U.S.A.

H Ex 79 49 2

advantages to the Rock Island Arsenal of the Watertown line over the other proposed lines, he can state much more exactly and clearly, and also as to the advantages thus gained, not only for navigation, but also for the water-power owned by the Government in connection with the Rock Island Arsenal.

At the time the project of damming the river at this point was suggested several years since, a contractor of large experience being requested to ascertain the cost of a dam near the head of the island, estimated it at from $300,000 to $400,000. As far as I know no other estimate has ever been made.

For a better understanding of this brief, I send by express, at the same time with this brief, a map showing the island of Rock Island and its immediate vicinity.

The dotted lines in the river show the location and direction of the channel. By examining the map the location of the pool with reference to the location of the arsenal and the railroad track belonging to the arsenal shows better, perhaps, than I can in any other way show, the contiguity of the pool to the arsenal.

The practicability of a dam at this point would only be decided by a careful survey made for that purpose. The red lines upon the map show the location that the wharves would probably occupy near the arsenal in the pool. They also show a possible plan of passing boats from the pool into the river below, by cutting a canal across the small artificial island south of the arsenal, known as the Sylvan Island, running an aqueduct across the water-power tail-race into a pool formed next the Illinois shore, by building a protection wall and a lock at the lower end. In case it was decided to build a dam near the head of Rock Island, there are at least three ways of descending to the river below; the first, by building a lock near the Iowa or north shore of the river, perhaps first carrying down a canal on that shore; second, by similar structures on the north or Iowa shore of Rock Island; and third, by going down through the pool and locking out at the lower end of the pool and dredging out the channel below. The latter plan would probably be the safest of the three, as avoiding all danger from ice at the break-up of the river. It is said that the logging interests of the upper river will oppose the damming of the river, but this is doubtless on the hypothesis that the dam would be so constructed that rafts could only pass the dam by being taken apart and reduced to such width that they could pass the lock. I inclose a tracing of a cross-section of the river near the point where I have suggested the erection of a dam, showing the depth of water, &c., at the low water of 1864, the lowest water ever known.

If it were perfectly convenient to return me the map, when the Department is through with it, I should be greatly obliged for the favor.

Very respectfully, yours,

EUGENE LEWIS.

General JOHN NEWTON,
Chief of Engineers, U. S. A.

[Senate Ex. Doc. No. 38, Forty-eighth Congress, first session.]

Message from the President of the United States, transmitting a communication from the governor of the State of Illinois, with a copy of an act of the general assembly of that State, tendering to the United States the cession of the Illinois and Michigan Canal, upon condition that it shall be enlarged and maintained as a national water-way for commercial purposes.

JANUARY 8, 1884.—Read and referred to the Committee on Commerce and ordered to be printed.

To the Senate and House of Representatives:

I submit a communication from the governor of the State of Illinois, with a copy of an act of the general assembly of that State, tendering to the United States the cession of the Illinois and Michigan Canal, upon condition that it shall be enlarged and maintained as a national water-way for commercial purposes.

The proposed cession is an element of the subject which Congress had under consideration in directing, by the act of August 2, 1882, a survey for a canal from a point on the Illinois River at or near the town of Hennepin, by the most practicable route, to the Mississippi River at or above the city of Rock Island, the canal to be not less than 70 feet wide at the water-line, and not less than 7 feet in depth of water, and with capacity for vessels of at least 280 tons burden; and also a survey of the Illinois and Michigan Canal, and an estimate of the cost of enlarging it to the dimensions of the proposed canal between Hennepin and the Mississippi River.

The surveys ordered in the above act have been completed, and the report upon them is included in the last annual report of the Secretary of War, and a copy is herewith submitted. It is estimated in the report that by the enlargement of the Illinois

and Michigan Canal, and the construction of the proposed canal, by the shortest route, between Hennepin and the Mississippi River, a direct and convenient thoroughfare for vessels of 280 tons burden may be opened from the Mississippi River to Lake Michigan, at a cost of $8,110,286.65, and that the annual charge for maintenance would be $138,600.

It appears from these papers that the estimated yield of corn, wheat, and oats for 1882, in the States of Illinois, Wisconsin, Iowa, Minnesota, Kansas, and Nebraska, was more than a thousand million bushels. It is claimed that if the cheap water transportation route which is now continuous from the Atlantic Ocean to Chicago is extended to the Upper Mississippi by such a canal, a great benefit in the reduction of freight charges would result to the people of the Upper Mississippi Valley, whose productions I have only partly noted, not only upon their own shipments, but upon the articles of commerce used by them which are now taken from the Eastern States by water only as far as Chicago.

As a matter of great interest, especially to the citizens of that part of the country, I commend the general subject to your consideration.

CHESTER A. ARTHUR.

EXECUTIVE MANSION,
January 8, 1884.

STATE OF ILLINOIS, EXECUTIVE OFFICE,
Springfield, November 12, 1883.

SIR: I have the honor to transmit herewith a certified copy of an act of the general assembly of this State entitled "An act ceding the Illinois and Michigan Canal to the United States," together with a proclamation of his excellency Shelby M. Cullom, at that time governor of the State, promulgating the vote of the people thereon.

In transmitting said act and proclamation to your excellency, permit me to call your attention to the report of the committee of the house of representatives of this State, on canal and river improvement, submitted to the house April 14, 1882, at the time the act of cession was reported to the house by said committee. The following extracts from that report fully set forth the history of said canal and the objects of the proposed cession on the part of the State of Illinois to the United States:

"By acts of Congress of the years 1822 and 1827 there was granted to the State of Illinois land for a canal connecting the Illinois River with the southern bend of Lake Michigan, and 90 feet of land on each side thereof; also a quantity of land, equal to one-half of five sections in width, on each side of said canal, from one end thereof to the other, with the proviso 'That the said canal, when completed, shall be and forever remain a public highway for the use of the Government of the United States, free from any toll or other charge whatever for any property of the United States or persons in their service passing through the same'; and that in case of failure to build this canal as required in these acts, 'the State should pay to the United States the amount of any land previously sold.'

"The gift and acceptance created a legal obligation on the part of the State to forever keep the canal in repair and open as a public water-way for the purposes indicated in the acts of Congress, and this obligation cannot be avoided at the will or convenience of the State. That the canal must be kept in operation forever is imperative, unless the State be released from this obligation. Nor does the obligation work a hardship to the State. It has not proven 'a bad bargain,' but a profitable one. The entire cost of the canal in its construction is, principal and interest, $6,557,681.50. The amount of moneys received by the State from the sale of canal lands given by the United States is $5,886,039.68. This, added to the net earnings, of the canal, viz, $2,933,691.74, makes an aggregate of lands and lots sold with the net earnings of the canal the sum of $8,819,731.42 realized by the State, which shows a balance of $2,262,049.92 clear profits which were paid into the State treasury, which is more than one-third of its entire cost. Besides this sum of money, the canal itself and many millions' worth of real estate, part of said canal lands, yet belong to the State.

"The whole northern part of the State has been greatly improved by the construction of the canal; Chicago, Ottawa, and all the cities between them have been laid out and built upon canal lands; and although the canal was constructed through a wild, uninhabited country, yet to-day it is truthfully said that 'the assesssed valuation of the four counties through which the canal passes is greater than the fifty counties south of the capital.' The above was the debit and credit sides between the State and canal in 1879, and they have not materially changed since, as the appropriations of the general assembly of 1879 and 1881, in aid of the canal, were never expended, and the canal has been self-sustaining. This statement of the financial condition of the canal shows that the State can well afford to keep it in repair, as by their contract with the United States they are bound to do. * * * There is no doubt, however, that a cession to the United States Government of the canal, and the lands remaining

unsold, and an acceptance thereof, would virtually release the State from the aforesaid obligation. * * * There is evidently an increasing desire among the people of this State for the transfer of the canal to the United States; 'to make it,' as the governor has expressed it in his message, 'a great water-way, free to the commerce of the people of the nation, and adequate to its requirements; wide and deep enough to contain a volume of water flowing constantly from the lakes to the Mississippi River of sufficient size to fully answer the demands of trade for years to come, and give a steady southerly current to the waters of Lake Michigan into the Illinois River.'

"In relation to the manner of this transfer, the governor says: 'I therefore respectfully request that you will enact a law, with proper safeguards in it, turning the control and ownership of the canal over to the United States, subject to a vote of the people at the next general election, in pursuance of our constitution. As the constitution requires that the proposition of transfer submitted should be specific, it seems to me that the establishment of the conditions and terms of the transfer is a necessary condition precedent to the submission of the proposition, and should be included in the same act which provides for such submission.'

"The governor states what he thinks the conditions precedent to the transfer ought to be, as follows: 'The improvement of the rivers which form the western and southern boundaries of our State should receive national aid, and I believe will do so, but I do not think it would be wise or pertinent to connect that with the transfer of the canal, or impose upon the transfer any conditions other than those which are immediately connected with the property, which seems to me to be, as already stated, the enlargement of the Illinois and Michigan Canal, and the improvement of the Illinois River.'

"Your committee unreservedly indorse the above recommendations and views of the governor. Since the completion of the canal it has been the policy of the State of Illinois to improve the navigation of the Illinois River, so that vessels drawing less than 7 feet could at all stages of water pass from the Mississippi River to Chicago without obstruction. In furtherance of this policy, the State has already constructed two permanent dams, one at Henry, the other at Copperas Creek, which causes a constant supply of water in the Illinois River, of never less than 7 feet in depth, the entire distance from some miles below Peoria and Pekin to the canal at Ottawa. The United States Government has lately taken this work in hand, and is now engaged in constructing other similar dams, which are intended to continue this stage of water the entire length of that river. If the canal was now enlarged so that river steamboats and other vessels drawing less than 7 feet could pass through it, we think the former policy of the State would be realized, and the commerce of the country vastly improved. We think this can be accomplished by the United States Government without unreasonable expense, considering the great value of the property proposed to be ceded with the canal."

I respectfully request that your excellency will transmit the said act and proclamation to the Congress of the United States, with such recommendation as may be deemed appropriate in view of the great importance of the question involved in the proposed session.

I have the honor to be, very respectfully, your obedient servant,

JOHN M. HAMILTON,
Governor of Illinois.

To his Excellency, CHESTER A. ARTHUR,
President of the United States, Washington, D. C.

AN ACT ceding the Illinois and Michigan Canal to the United States.

SECTION 1. *Be it enacted by the people of the State of Illinois, represented in the general assembly*, That the Illinois and Michigan Canal, its right of way and all its appurtenances, and all right, title, and interest which the State may now have in any real estate ceded to the State by the United States for canal purposes, be, and are hereby, ceded to the United States, for the purpose of making and maintaining an enlarged canal and water-way from Lake Michigan to the Illinois and Mississippi rivers; and this cession is made upon the condition that the United States shall, within five years from the time this act takes effect, accept this grant, and thereafter maintain the said canal and water-way for the purpose aforesaid. In case the United States shall accept this grant, it is upon the express condition that the canal shall be enlarged in such manner as Congress shall determine, and be maintained as a national water-way for commercial purposes, to be used by all persons, without discrimination, under such rules and regulations as Congress may prescribe; and the real estate aforesaid, hereby conveyed to the United States, shall be used and the avails thereof applied to carry out the objects of this grant, and for no other purpose, in such manner as Congress may determine.

SEC. 2. The general assembly shall have power to withdraw and revoke this proposed grant at any time previous to its acceptance by Congress; but when the United States, by act of Congress, shall accept the grant and conditions provided for by section one of this act, the governor shall immediately thereafter execute and deliver in the name of the State of Illinois, to the United States, a deed of cession, in accordance with the provisions of this act, and shall then and there, or as soon as practicable, surrender all property mentioned in this act to be granted to the proper authorities of the United States; and until the delivery of such deed, and acceptance of the same (together with the property conveyed) by the United States, the authority and duty of the State of Illinois to operate said canal, and control its property and appurtenances, shall in no respect be impaired.

SEC. 3. This act shall not take effect until it shall first have been submitted to a vote of the people of the State of Illinois at the general election to be held on Tuesday, the 5th day of November, A. D. 1882, and have been approved by a majority of all the votes polled at such election. At the said election the ballots, in so far as they relate to this act, shall be in the following form: "For the act ceding the Illinois and Michigan Canal to the United States," and when so voted, it shall count in favor of this act, but if canceled with ink or pencil, it shall be counted against this act. The returns of the whole vote cast at said election, and of the votes for the adoption or rejection of this act, shall be made and canvassed by the same officers and in the same manner as are the returns of the votes for senators and representatives of the State of Illinois; and if it shall appear that a majority of the votes polled are "for the act ceding the Illinois and Michigan Canal to the United States," the governor shall make proclamation thereof, and this act shall take effect from and after the date of such proclamation; but if a majority of the votes cast are "against the act ceding the Illinois and Michigan Canal to the United States," then this act shall be null and void.

JOHN M. HAMILTON,
President of the Senate.
HORACE H. THOMAS,
Speaker of the House of Representatives.

Approved April 28, 1882.

S. M. CULLOM,
Governor.

Originated in the senate.
[SEAL.]

GEORGE TERWILLIGER,
Secretary of the Senate.

UNITED STATES OF AMERICA,
State of Illinois, ss:

OFFICE OF SECRETARY.

I, Henry D. Dement, secretary of state of the State of Illinois, do hereby certify that the foregoing is a true copy of "An act ceding the Illinois and Michigan Canal to the United States," the original of which is now on file in this office.

In witness whereof I hereto set my hand and affix the great seal of state at the city of Springfield this 12th day of November, A. D. 1883.
[SEAL.]

HENRY D. DEMENT,
Secretary of State.

PROCLAMATION.

STATE OF ILLINOIS,
Executive Department.

Whereas, in pursuance of an act of the general assembly of this State, entitled "An act ceding the Illinois and Michigan Canal to the United States," approved April 28th, 1882, the electors of the State of Illinois did, on Tuesday, the seventh day of November, 1882 (it being the day fixed by law for such election), vote for and against the act ceding the Illinois and Michigan Canal to the United States; and

Whereas on the 21st day of November, 1882, a canvass of the votes cast at said election, as certified to by the county clerks of the several counties of the State, was made in my presence by Henry D. Dement, secretary of state, Charles P. Swigert, auditor of public accounts, and Edward Rutz, treasurer of the State, who are designated by law for that duty; and

Whereas it appears from said canvass that the total number of votes cast at said election was 532,583, of which 363,855 votes were cast "For the act ceding the Illinois and Michigan Canal to the United States," and 59,675 were cast against said act:

Therefore, I, Shelby M. Cullom, governor of the State of Illinois, do hereby proclaim that a majority of all the votes cast by the electors of the State of Illinois at said

election was "For the act ceding the Illinois and Michigan Canal to the United States," and the said act takes effect and is in force from and after the date of this proclamation.

In testimony whereof I hereunto set my hand and caused the great seal of state to be affixed.

Done at the city of Springfield this 22d day of November, A. D. 1882.

S. M. CULLOM.

By the governor:
[SEAL.]

HENRY D. DEMENT,
Secretary of State.

UNITED STATES OF AMERICA,
State of Illinois, ss:

OFFICE OF SECRETARY.

I, Henry D. Dement, secretary of state of the State of Illinois, do hereby certify that the foregoing is a true copy of proclamation by the governor in relation to the act of the general assembly of Illinois ceding the Illinois and Michigan Canal to the United States, the original of which is now on file in this office.

In witness whereof I hereto set my hand and affix the great seal of state, at the city of Springfield, this 12th day of November, A. D. 1883.

[SEAL.]

HENRY D. DEMENT,
Secretary of State.

EXECUTIVE MANSION,
November 15, 1883.

Respectfully referred to the Secretary of War.
By direction of the President.

FRED. J. PHILLIPS,
Private Secretary.

WAR DEPARTMENT,
December 11, 1883.

Respectfully returned to the President, inviting attention to the inclosed report of the Chief of Engineers, in whose recommendation I concur.

ROBERT T. LINCOLN,
Secretary of War.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., November 27, 1883.

SIR: I have the honor to acknowledge the reference to this office, on the 17th instant, of the letter of the Hon. John M. Hamilton, governor of Illinois, addressed to the President, inclosing copy of act and canvass of votes of the people of that State regarding the cession to the United States of the Illinois and Michigan Canal, &c., and to return the same with report, as follows:

The river and harbor act of August 2, 1882 (22 Stat. at L., page 207), directs a survey of a canal from a point on the Illinois at or near the town of Hennepin, by the most practicable route to the Mississippi River at or above thecity of Rock Island, of dimensions not less than 70 feet wide at water-line, and not less than 7 feet deep, with locks not less than 150 feet in length and 21 feet wide, &c., and also directs a survey to be made of the Illinois and Michigan Canal, and estimates of the cost of enlarging the same so as to correspond in dimensions with the proposed Hennepin Canal.

The surveys have been completed and form part of Appendix G G of the Report of the Chief of Engineers for 1883, copy herewith.

The surveys demonstrate a perfectly feasible route for the Hennepin Canal. Three lines were surveyed, known respectively as the Marais d'Osier, the Watertown, and the Rock Island routes. The eastern division, which includes that portion from the Illinois River to the summit level at the feeder-junction is common to all.

The following are the estimates of cost:

MARIAS D'OSIER ROUTE.

Construction of canal and feeder, including right of way	$5,811,367 50
Maintenance and ordinary repairs annually	88,600 00

WATERTOWN ROUTE.

Construction of canal and feeder, including right of way	$7,207,646 88
Maintenance and ordinary repairs annually	91,245 00

ROCK ISLAND ROUTE.

Construction of canal and feeder, including right of way	$6,672,890 67
Maintenance and ordinary repairs annually	94,820 00
The length of the feeder from Rock River at Dixon is 37 miles, and its estimated cost, included in each of the above, is	1,664,117 52

The present dimensions of the Illinois and Michigan Canal are: Width, about 60 feet at surface, 6 feet deep; locks, 110 feet long, 18 feet wide.

The estimates for the Hennepin Canal are based upon the following dimensions: 80 feet wide at water-surface, 7 feet deep; locks, 170 feet long, 30 feet wide; and the estimated cost of enlarging the Illinois and Michigan Canal so as to conform to these dimensions is $2,298,919.15. Cost of maintenance and ordinary repairs, annually, $50,000.

It is understood that no changes in the present line of the canal, nor in the number and location of the locks and other structures, will be necessary.

Inasmuch as Congress has made provision for a survey and estimate for enlarging the Illinois and Michigan Canal, and as the State of Illinois has taken steps towards transferring the canal to the United States, and as there appears to be no question as to the benefit which would result to commerce and navigation by the proposed enlargement in case the Hennepin Canal project is adopted, it is recommended that the subject be submitted to Congress in accordance with the wishes of the governor of Illinois.

In connection with this subject attention is respectfully invited to the accompanying map of the survey for the Hennepin Canal, prepared by Maj. W. H. H. Benyaurd, Corps of Engineers, 1882, and to the following, compiled in this office:

Sketch showing the Illinois and Michigan Canal and the routes for the proposed Hennepin Canal.

Sketch of the Illinois and Michigan and the proposed Hennepin canals, showing their relations to the Illinois and Mississippi rivers and to Lake Michigan.

Very respectfully, your obedient servant,

H. G. WRIGHT,
Chief of Engineers,
Brig. and Bvt. Maj. Gen.

Hon. ROBERT T. LINCOLN,
Secretary of War.

[Extract from the Annual Report of the Chief of Engineers to the Secretary of War.]

G G 4.

SURVEYS FOR THE HENNEPIN CANAL, AND FOR THE ENLARGEMENT OF THE ILLINOIS AND MICHIGAN CANAL.

UNITED STATES ENGINEER OFFICE,
Chicago, Ill., March 31, 1883.

GENERAL: I have the honor to present the following report upon the surveys of the Hennepin Canal, as authorized by the act of Congress passed August 2, 1882, and assigned to my charge by letter from your office under date of August 11 last. The full text of the section of the act referred to is as follows:

"That the Secretary of War be, and is hereby, authorized and directed to survey and locate a canal from a point on the Illinois River at or near the town of Hennepin, by the most practicable route to the Mississippi River at or above the city of Rock Island, with a branch canal or feeder from the most practicable and convenient point on Rock River to the most practicable and convenient point on the main line of said canal. Said canal and said branch shall not be less than seventy feet wide at the water-line, and not less than seven feet in depth of water, with locks not less than one hundred and fifty feet in length and twenty-one feet in width, and with a capacity for vessels of at least two hundred and eighty tons burden; and for that purpose the Secretary of War shall have power, by engineers and agents employed by him, to enter upon any lands for the purpose of making the necessary preliminary examinations and surveys; and the cost of construction, the annual cost of maintenance, and economy of use of said canal when completed shall be estimated and accompany the said surveys; and the Secretary of War shall cause to be made, by skillful engineers of the Army, a survey of the Illinois and Michigan Canal, connecting the Illinois River with Lake Michigan at Chicago, and estimate the cost of enlarging the same, so as to correspond

in dimensions with the proposed canal between Hennepin and the Mississippi River, and to report to the next session of Congress the cost of enlarging said canal and the construction of the canal between Hennepin and the Mississippi, and the right of way therefor; and for the purpose of this paragraph the sum of thirty thousand dollars, or so much thereof as may be necessary, is hereby appropriated: *Provided*, That nothing herein shall be construed to commit the Government to proceed with the construction of the said improvement."

Upon the approval by the Department of the project for the survey, the necessary arrangements were made for putting the parties into the field, with a view of commencing the survey at the earliest date practicable, and completing it before the winter season set in. Three parties were at once organized; one for the main lines between the Illinois and Mississippi rivers; a second for the feeder from Rock River, while a third was assigned the survey of the Illinois and Michigan Canal, with a view to its enlargement. The surveys of the main lines and feeder were under the charge of Mr. H. B. Herr, assistant engineer; that of the Illinois and Michigan Canal was first under Mr. Thomas Merritt, and afterwards under Mr. George Y. Wisner, who completed the work and rendered the report thereon.

HENNEPIN CANAL.

FORMER SURVEYS AND ESTIMATES.

A survey for a canal between the Illinois and the Mississippi was made for certain parties in 1866, by Mr. J. O. Hudnutt, civil engineer. The route selected started from Hennepin and ended in the vicinity of Watertown, on the Mississippi, with a feeder from Rock River, at Dixon.

In connection with this survey other lines were run from the vicinity of Watertown to Moline and Rock Island, and thence back to the original line near Colona, via Rock River, but they were not adopted as any part of the main line, nor were they considered in the estimates. The canal proposed by Mr. Hudnutt was 60 feet on the water line, and 6 feet deep, with locks 150 by 21 feet; the feeder was 60 feet wide and 5 feet deep. The total estimated cost of construction was about $4,500,000.

In 1870 the first survey for the Government was made under the direction of Col. J. N. Macomb, by Mr. Gorham P. Low. The route selected followed the Hudnutt survey very closely both on the main line and the feeder. The latter was carried as before from Rock River above the Dixon Dam. This survey was for a ship-canal 160 feet on the water line, and 7 feet depth, with locks 350 feet long and 75 feet wide, corresponding in size with those intended for the improvement of the Illinois River; the feeder was 140 feet wide on water line and 7 feet deep; the estimated cost of the whole being $12,479,693. Based upon the results of that survey there were also submitted at the same time estimates amounting to $3,899,722 for a commercial canal of the same dimensions as proposed by Hudnutt, but with composite locks.

In 1874, in connection with the question of the transportation routes to the seaboard, another survey was ordered for a canal connecting the Illinois and Mississippi rivers, including also the Illinois and Michigan Canal. For want of time only this latter survey was completed, and for the former the line surveyed in 1870 was adopted, and estimates made and presented for a canal between Hennepin and Watertown, with locks 170 feet long and 30 feet wide; the cost of construction being estimated at $4,541,000.

PRESENT SURVEYS.

The act of Congress as above quoted authorized the survey and location of the most practicable and convenient route between the two rivers, and its wording as interpreted by me was that while the original line known as the Hennepin Canal route (from Hennepin to Watertown) had been surveyed and estimated upon several times, and its main features were well known, there were and might be other lines that would afford a more practicable, convenient, and economical canal communication between the two rivers. That other routes than the once to Watertown have been urged is evidenced by the fact that in the report of the Senate Committee on Transportation Routes to the Seaboard the following paragraphs touching on this point occur:

"It is also proposed that the western terminus of the canal shall be at a point on the Mississippi about 20 miles above Rock Island. * * * It has also been proposed to substitute a line running from Chicago almost directly west, and striking the great eastern bend of the Mississippi at or near Fulton, Ill. The practicability of neither of these two lines has yet been determined by means of a survey."

It might here be incidentally mentioned that a line could possibly be found, starting from the vicinity of the feeder junction, and running in a northwesterly direction, com-

ing out near Fulton, as above proposed, and fulfil the conditions required by the law. For convenience of description and comparison I have divided the line into two divissions, viz, the eastern and western. The former includes that portion from the Illinois River to the summit level at the feeder junction, and the latter from that point to the Mississippi. For this western division three lines were surveyed and are designated, respectively, as the Marais d'Osier * Route, the Watertown Route, and the Rock Island Route. It had been the intention at first to survey only the first, and by comparison with the data furnished by the former surveys make up the estimates for the other lines, with the same sized canal and locks, but for reasons set forth in the communications to the Department by those particularly interested in the Watertown and Rock Island routes, it was finally decided to rerun these two lines and make up the estimates therefor direct.

That portion of the line from the Illinois River to the feeder junction, a distance of 25 miles, is common to the three routes; at this point the Marais d'Osier line diverges, while the other two lines continue in common to the fifty-seventh mile from Illinois River, near Colona, when the Rock Island line diverges, via Green and Rock River to its termination, while the Watertown Route is continued westwardly to the Mississippi.

EASTERN DIVISION.

Various surveys demonstrate that the only feasible line westward from the Illinois River in the vicinity of Hennepin was through the valley of Bureau Creek. The initial point of the present survey is 1¾ miles north of the town of Hennepin, at Spring Lake, where a favorable site exists for construction of a basin, thence the line is continued up Bureau Creek Valley to the fifteenth mile, crossing the Rock Island Railroad to a point 3 miles from the Illinois River, and is maintained north of the railroad the remainder of the distance, passing under the Chicago, Burlington and Quincy Railroad, at the seventeenth mile. At the fifteenth mile the route enters Pond Creek Valley, and reaches the summit level at the eighteenth mile.

The summit level is 7 miles long, and at its western extremity, a point about 4 miles north of Sheffield, receives the feeder from Dixon.

WESTERN DIVISION.

Marais d'Osier Route.—From the feeder junction this line runs northwestwardly, following the valley of Hickory Creek to about the thirtieth mile from the Illinois River. It then enters Saint Peter's Marsh, crosses Green River by an aqueduct 430 feet long, is then carried through One Hundred Acre Slough and Big Slough, and around Spring Hill to a bayou leading into Rock River, reaching this river 1½ miles south of Erie, at the fiftieth mile. The stretch through the marsh and sloughs, as above, is level, and in length about 16 miles, requiring but little heavy cutting or embankment. It is proposed to cross Rock River in a pool formed by a dam to be built 700 feet below, and of sufficient height to give the required depth of water. On the west side of Rock River another bayou is taken advantage of, carrying the canal about a mile, thence a direct course is taken across the depression known as the Marais d'Osier, and at the western extremity thsreof takes a slough by that name to the Mississippi nearly opposite the town of Comanche, and about 2 miles below Albany. The slough at the entrance to the Mississippi affords facilities for the excavation of a protected basin. The total length of this entire line is 64 miles.

Watertown Route.—Starting from the feeder junction, as before noted, the line follows generally the route formerly surveyed, crossing to the south side of Hickory Creek Valley, thence in a westerly direction, passing near the towns of Annawan and Atkinson, and reaching the vicinity of Green River near the forty-sixth mile. Continuing near this river, the line passes 2 miles north of Geneseo at the forty-ninth mile, and thence to Green River at the fifty-eighth mile. It is proposed to cross this latter by an aqueduct 400 feet long, thence the route is carried to Rock River, where a crossing is effected by an aqueduct 1,500 feet in length. From Rock River to the Mississippi a low, flat depression is followed, and Watertown reached at the sixty fourth mile. Here the Mississippi affords but 2 feet at extreme low water over a rocky bottom, and therefore the excavation must be carried a distance of about 1 mile in order to reach the channel of 4 feet, excavated by the Government through Campbell's Chain. The total length of this route is 65.2 miles.

Main line to Rock Island.—This route branches off at the fifty-eighth mile on the Watertown route, and enters Green River at the fifty ninth mile. It follows that river to its junction with Rock River, thence down the latter to Milan, and across the low point to the Mississippi about 1½ miles below the city. The total length of this line is 74.5 miles.

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*Usually known as Meredosia.

The route via Green and Rock rivers is made feasible by the construction of two dams, and by raising the existing dam at Milan.

The aggregate lockage from the Illinois River to the summit level is 205 feet, requiring twenty-three locks with lifts from 7 to 10 feet; thence to the Mississippi the descending lockage via the Marais d'Osier is 75 feet, requiring eight locks; via Watertown, 86 feet, requiring nine locks, and via Rock Island 101 feet, with twelve locks.

FEEDER BRANCH.

The law provided for a feeder from Rock River. The nearest point on that river having sufficient elevation for the purpose is above the dam at Dixon, and accordingly the line was started there. To avoid expense and complications with the corporations controlling the right of way down the avenue at Dixon, through which it was necessary to carry the freder, it is proposed to form a basin below the Illinois Central Railroad embankment, and to supply this basin by a channel of narrower dimensions than those proposed for the feeder, leading to the pool above the dam, and so arranged as not to interfere with the operations of the mills.

From the basin the line follows the river to about the tenth mile; it then turns southward through the flat prairie land and the Winnebago swamps, and reaches Green River at New Bedford in the thirtieth mile from Dixon. Green River is crossed by an aqueduct 150 feet long, and the line is carried thence to the junction of the main line at the western extremity of the summit level. The total length of the feeder is 37.1 miles, with a fall of 3 feet.

DIMENSIONS OF CANAL AND LOCKS.

It is proposed to make the canal and feeder 80 feet wide on the water surface, and 7 feet deep, with slopes of 1 on 1½. The locks for the main canal are 170 feet long and 30 feet wide. These latter dimensions were adopted after considering the question of low-water navigation on the Upper Mississippi, as affecting barge transportation. The hull measurement of the larger size barges adapted to the passage of the locks is, according to the custom-house authorities, about 300 tons, though with deeper water afforded by higher stages of the river, and also by the proposed dimensions of the canal, such barges can, with the box-top, carry over 600 tons; but we had to be governed by the minimum draught of the boats at the most unfavorable stage of the main river.

The same lock dimensions for the Hennepin Canal were also adopted by Colonel Macomb in the report of 1874, in connection with the subject of transportation routes to the seaboard.

The locks and the accessory works for the canal, such as culverts, weirs, &c., are of the usual type designed for works of like character, and need no special description. The number and location, together with all other details, are fully set forth in the accompanying report.

It will be noticed that no provision has been made for the protection of the slopes, arising from the fact that it was impossible to determine, until the work of excavation was carried on, precisely when such protection would be especially needed.

WATER SUPPLY.

In this, as in former surveys, it is provided that the water should be supplied the canal from Rock River, and that the feeder should be of the same dimensions as the main canal. To supply the losses due to lockage, evaporation, absorption, filtration, leakage, and other incidental causes, the amount necessary for the different routes to be supplied from Dixon has been calculated as follows:

	Cubic feet per day.
Marais d'Osier line	13,634,000
Watertown line	14,690,000
Rock Island line	14,338,000

The computations therefor agree in the result with those derived from the figures for water consumption as presented by Colonel Merrill in his translation of Graeff's *Canal Construction and Water Supply*. It will be observed that the western section of the Marais d'Osier line between Rock River and the Mississippi, a distance of 16 miles, is fed from Rock River at the point of crossing the former river, and not from Dixon; and that the Rock Island route also draws a portion of its supply from Lower Rock River, which it traverses. To determine the quantity chargeable to lockage it has been assumed that the maximum number of boats that can pass the summit level in one day is 90, at the same time considering that the movement is not entirely in one direction, but that a proper proportion of boats go each way, and under that supposition one and a half lockfuls to each boat is an ample allowance.

It has been feared by those interested in the development of the water-power at Rock River that the abstraction of the amount of water necessary for canal purposes would result in injury to the manufacturing interests at various points along the river. Taking the canal at its maximum capacity of ninety boats per day, there would be taken from the river, at its very lowest stage, for the Marais d'Osier route, 5.2 per cent. of the discharge of the river at that time; for the Watertown route, 5.7 per cent.; and for the Rock Island route, 5.5 per cent. The river, however, has not been at its very lowest stage since 1870, and it must be observed that should the canal be constructed it will undoubtedly be many years before it would be taxed to its maximum capacity. In the mean time arrangements could be made to supply the canal from other sources along the line, utilizing portions of the swamp areas for storage reservoirs for the summit level. Under such conditions, I do not consider that any fear need be entertained of danger to the water-power interests on Rock River. To lessen as much as possible the amount of leakage at certain points on the main line and feeder where the canal is excavated through sandy and gravely soil, notably in Bureau Creek Valley and on the Watertown line, it is proposed to insert a lining of concrete about 6 inches thick.

RIGHT OF WAY.

A width of 90 feet on each side of the center line of the canal has been reserved and estimated for in the right of way, and a valuation put upon the same derived from information respecting the value of land in the vicinity. At the same time care has been observed in locating the lines to avoid as far as possible encroaching upon valuable land or buildings. It is proposed to inclose the entire right of way by a wire fence.

MAINTENANCE.

Under this head are included the amounts necessary for the care, preservation, and repairs of the canal; the pay of all employés as assistant engineers, lock and bridge tenders, office expenses, &c., all of which will have to be provided for annually. In addition there will undoubtedly have to be made from time to time appropriations for extraordinary repairs, renewals, &c., which cannot be estimated beforehand.

COMMERCIAL STATISTICS.

For the information concerning the commercial importance and the general effect and benefit of the construction of the canal on the transportation of the products of the Northwest, I am greatly indebted to Mr. Edward Russell.

GENERAL CONDITIONS AFFECTING THE DIFFERENT ROUTES.

The surveys demonstrate that a perfectly feasible route exists for a canal from the Illinois River, near Hennepin, to the Mississippi, at or above Rock Island. The question as to the selection of the best one can only be settled after a consideration of the advantages and disadvantages of each.

In this comparison we are mainly concerned with the lines west of the summit level, as the line of the eastern division is common to all routes. This latter division is very expensive considering its length of only 18 miles, being at an average cost of $98,074.77 per mile; while on the western division the Marais d'Osier is $43,360.12 per mile, the Watertown $76,906.77, and the Rock Island $51,654.62. The feeder averages $44,852.92 per mile.

In an engineering point of view the Marais d'Osier presents decided advantages arising from the nature of the country through which the line is carried, and the character of the soil. These render the work of excavation and construction easier, with a corresponding reduction in the estimated cost over the other routes. No rock is met with, as is the case at points on the Watertown and Rock Island routes. An objection has been urged to this route that it is impracticable to carry a canal through the Marais d'Osier. It may be observed, on the contrary, that probably no other portion of this or the other line presents such favorable features for canal construction. On this point I quote from the report of General J. H. Wilson on the improvement of Rock River by slackwater navigation:

"In connection with the Rock River survey, I caused the Marais d'Osier, a swampy stretch of country extending from the Rock River to the Mississippi, to be surveyed by my assistants, Messrs. Abbott and Morgan, civil engineers. It is reported that during high water in either river this marsh is flooded so that boats may pass from one to the other.

"The map and profile of this survey will be prepared without delay, and forwarded to the engineer department. They show the practicability of making a branch canal along the line whenever the interest of the country may demand it."

On the question of water supply, the Marais d'Osier route is fed from the Dixon Dam only as far as the crossing of Rock River, while the Watertown route must be supplied its entire length, 16 miles greater, and the Rock Island Canal 10 miles greater, on advantage to the Marais d'Osier route.

The Watertown route ends at the Mississippi on the rapids, through which the Government has excavated a channel of 4 feet depth. In order to reach this channel, which is on the Iowa side of the river, it will be necessary to excavate a channel over a mile long, through rock, in order to obtain 4 feet depth as an entrance into the canal. Sufficient depth of water is found at the terminus of the other routes. The number of accessory works, as culverts, bridges, &c., on the Watertown and Rock Island routes is double of what is found necessary on the Marais d'Osier, adding not only to first cost of construction, but increasing the annual cost of maintenance and the liability for extraordinary repairs and renewals hereafter. The route also affords a protected basin at its western extremity, which cannot be found on the other lines, except at great expense.

In a commercial point of view the selection of either one of the lines depends upon the section of the country it is intended to benefit. The distance from the upper line to Saint Paul is 350 miles, and if the canal be considered as an extension westward of the navigation of that part of the Upper Mississippi, the distance to Chicago is, by the Marais d'Osier route, 21 miles shorter than by Watertown, and 40 miles shorter than via Rock Island, and at the same time the navigation over the Rock Island Rapids is avoided.

Of the feeder, it may be said that the law required that it should run from Rock River, probably because that stream can at all stages be depended upon to furnish a reliable supply of water. It is 37 miles long, and in that respect adds greatly to the cost of construction and expense of maintenance, and is objectionable on the ground that upon it alone, with the exceptions before noted, depends the entire water supply. Should a break or any such accident happen to it, the entire canal would be deprived of the water necessary for its successful operation. It might here be noted also that its size was required to be that of the main canal. If it be designed simply as a feeder, there is no necessity of having it of the dimensions designed. Should the construction of the canal be hereafter authorized, I think it would be desirable to investigate the question of supplying the canal from other sources, as no doubt the areas of swamp lands between Rock and Green rivers can be utilized for that purpose.

The Marais d'Osier presents these advantages over the others: It is the shortest and most practicable line between the two rivers. The nature of the country through which it passes renders the construction of all work upon it easier, and hence its cost of construction is less.

The annual cost of maintenance is less, and it is more than likely the expense of extraordinary repairs and renewals will be less. The supply of water is the least, and better regulated.

ENLARGEMENT OF THE ILLINOIS AND MICHIGAN CANAL.

This survey, which was commenced in September, 1882, and finished early in the following November, embraced only a remeasurement of the lines and sections of the canal and accessory works throughout the entire length from Chicago to La Salle, for the purpose of obtaining information necessary to estimate the cost of enlarging the same to correspond with the proposed dimensions of the Hennepin Canal. The locks now in use are 110 feet long by 18 feet wide.

Other surveys and estimates have heretofore been made and presented; but they were for a ship canal, with locks 350 by 75, the size now in course of construction on the Illinois River. The information obtained during the present survey can be utilized for calculating the cost of enlarging the present canal to any other size than that now proposed, should it be deemed necessary.

The lockage, which is all descending, amounts to 141.5 feet, requiring for that purpose sixteen locks, with lifts varying from 6.5 to 13.5 feet. The water will be supplied by pumps, now in course of construction at Bridgeport, which furnish 1,000 cubic feet per second.

It is not proposed to make any change in the present line of the canal nor in the number and location of the locks and other structures.

In the new constructions a considerable portion of material from the old locks and from the canal lands could be utilized in various ways.

The estimated cost of the enlargement of the canal, locks, and other structures is $2,298,919.15.

In estimating for maintenance, I have been governed somewhat by the expenses of the present canal.

For the ordinary repairs, maintenance, and extraordinary repairs, &c., there has been expended for the past ten years an average of $93,235 per annum, of which

amount an average of $47,817 per annum has been charged to maintenance and ordi-dinary repairs, and I have taken the cost of the same on our proposed work of $50,000.

By an act of the legislature of the State of Illinois approved April 28, 1882, the canal was ceded to the United States, provided the same be accepted within five years, which cession was ratified by a majority of all the votes polled at the election held in November last.

A copy of the act is appended.

Estimates.

MARAIS D'OSIER ROUTE.

Estimated cost of construction of canal and feeder, including right of way	$5,811,367 50
Estimated cost of maintenance and ordinary repairs annually	88,600 00
Outfit of dredges, boats, &c	36,000 00

WATERTOWN ROUTE.

Estimated cost of construction of canal and feeder, including right of way	7,207,646 88
Estimated cost of maintenance and ordinary repairs annually	91,245 00
Outfit of dredges, boats, &c	36,000 00

ROCK ISLAND ROUTE.

Estimated cost of construction of canal and feeder, including right of way	6,672,890 67
Estimated cost of maintenance and ordinary repairs annually	94,820 00
Outfit of dredges, boats, &c	36,000 00
The length of the feeder from Rock River at Dixon is 37 miles, and its estimated cost, included in the above, is	1,664,117 52

ENLARGEMENT OF THE ILLINOIS AND MICHIGAN CANAL.

Estimated cost of construction	2,298,919 15
Estimated cost of maintenance and ordinary repairs annually	50,000 00

There are transmitted herewith the reports of Mr. H. B. Herr, assistant engineer, on the surveys of the Hennepin Canal, and Mr. George Y. Wisner, assistant engineer, on the Illinois and Michigan Canal, together with 15 sheets of maps and profiles pertaining to the same.

Very respectfully, your obedient servant,

W. H. H. BENYAURD,
Major of Engineers.

Brig. Gen. H. G. WRIGHT,
Chief of Engineers, U. S. A.

SURVEYS FOR A CANAL FROM THE ILLINOIS RIVER NEAR HENNEPIN TO THE MISSISSIPPI RIVER AT OR ABOVE ROCK ISLAND, ETC.

REPORT OF MR. H. B. HERR, ASSISTANT ENGINEER.

UNITED STATES ENGINEER OFFICE,
Chicago, Ill., March 15, 1883.

MAJOR: I have the honor to submit the following report upon surveys for a canal route from the Illinois River near Hennepin to the Mississippi River at or above Rock Island, with a feeder branch from Rock River.

The dimensions adopted in a conference with you for the canal and feeder branch to accommodate boats of about 300 tons burden are the following, viz:

	Feet.
Width of water surface	80
Depth of water	7
Top width of banks	8
Inside and outside slope of banks, 1 on 1½.	
Length of locks between miter sills	170
Width of locks between walls	30

Upon the receipt of your instructions, on August 28, 1882, to make the survey, a party, under the immediate charge of General Charles A. Gilchrist, was organized and went into camp at Dixon, Ill., on September 5, and commenced the survey of the feeder branch at that place, with instructions to follow as nearly as practicable the line surveyed by Mr. Gorham P. Low in 1870, under direction of Col. J. N. Macomb, Corps of Engineers, except where a better location could be found.

A description of this line will be given further on in this report.

MAIN LINE, VIA THE MARAIS D'OSIER.

After the Dixon party was well under way, and a second party organized, with Mr. Charles E. Taft in immediate charge, I made a careful reconnaissance of the low lands contiguous to the west bank of the Illinois River, in the vicinity of Hennepin, and also of the Bureau Creek Valley, for a distance of several miles westward. In the mean time the survey party had assembled and went into camp September 12. The organization included the following sub-parties, viz: Transit, topographical, main-levels, and cross-section party.

Evidently the only feasible route from near Hennepin to about 15 miles westward lies within the valley of Bureau Creek, a stream usually of small proportions, but which becomes in the flood season a torrential river, as evinced by the water-marks left on trees, buildings, and other structures by the flood of July, 1882. These marks have an average height above low water of about 14 feet. An oscillation so great necessitates avoiding the lowest line of the valley in canal construction. Another prominent and considerable obstacle to an economical construction through many parts of this valley is the Chicago, Rock Island and Pacific Railway, which has naturally taken the most practicable location between the stream and bordering hills.

As the stretch across the bottom lands from the Illinois to entrance of Bureau Creek Valley must be made at a great cost for earthwork (on account of 20 feet oscillation of the river), the point selected for the terminus of the line was adopted with the view of shortening this distance, and at the same time to secure a good entrance to the river where the channel lies along the west bank. This point is about 1¾ miles above Hennepin, and satisfies the above requirements. Here, at about 400 feet from the river bank, a natural depression called Spring Lake is crossed by the line, and a basin for laying up boats is proposed.

Instead of constructing the canal in embankment across the low land, it will be in excavation to the higher land near the first mile, where a flight of two locks with lifts of 9 feet each will be placed and arranged as a guard-lock. About one-half mile from these locks the Peoria branch of the Chicago, Rock Island and Pacific Railroad is crossed with water surface in canal 14 feet below rails. A fixed bridge and a raise of 3 feet in grade of the railroad will give 15 feet head-room for boats. In view of the damage a railway sustains from the introduction of a pivot-bridge in its line, as few crossings at grade as possible have been made. The first is near the three-mile station at Lepertown Mill, and requires a pivot bridge. This is the only crossing of the Chicago, Rock Island and Pacific Railroad, though the line lies contiguous to its right of way most of the distance from this crossing to Pond Creek Station, near Wyanet. At many points in this stretch the cost of construction would be lessened by more than half if the railway right of way were encroached upon, and especially if the track were moved at several points.

East Bureau, a branch of Bureau Creek, is crossed on an aqueduct 270 feet long, about the fourth mile; the main stream is crossed twice on aqueducts, each 270 feet long, at the seventh and twelfth miles, respectively.

After crossing West Bureau Creek, also by a 700-foot aqueduct, the line leaves Bureau Creek Valley at the fifteenth mile and enters Pond Creek Valley. The only town near the route thus far is Tiskilwa, where the line passes about 1,000 feet north of the railway. Near this town two mill-races are cut, but provision is made for their maintenance. In many places near Bureau Creek gravel and sand predominate to such an extent that a special lining of concrete is required.

Throughout the first mile, after entering the valley of Pond Creek, the railway offers a great obstacle, forcing the line into the bluffs, and to give access to the station of Pond Creek the highway leading from Wyanet must be carried over the canal, railway, and Pond Creek, a total distance of 350 feet.

A short distance beyond the station the line swings to the northward, and, following up a small ravine, passes under the Chicago, Burlington and Quincy Railway about a mile south of Wyanet, at an elevation such that surface of water in the canal would be 21 feet below the rails. The arch under railway will be in the prolongation of lock-walls, and only 30 feet wide. Provision is made for taking the small rivulet in this valley into the canal and wasting it out at the lower end of valley. On reaching the head of this valley a farther change of course northward is made, crossing the Wyanet and Sheffield highway at the seventeenth mile, and reaching the

summit-level a mile farther on, where the bottom of the canal will be 198 feet higher than surface of water in Illinois River at Hennepin, requiring twenty-two lift-locks between.

Another line was surveyed over the summit, passing south of the one adopted, but was found to be more expensive, hence abandoned. It is shown on tracings.

With but little excess of embankment in crossing the Devil's Slough, and no seriously heavy cutting, this level continues 7 miles to the feeder junction at the twenty-fifth mile, and about 4 miles due north from Sheffield, skirting the Devil's Grove, and crossing Hickory Creek near the junction.

Before the survey had reached this point, and after our joint examination, early in October, of Marais d'Osier region between Rock and Mississippi Rivers, I had your instructions to reach the Mississippi somewhere in the vicinity of this depression if easy access could be had from the feeder junction. Through much inquiry of persons familiar with the country to be traversed, and by a hurried reconnaissance of part of the region, I felt satisfied that a good route could be found in that direction, and conducted the survey with this view, after reaching the injunction with feeder.

The route follows the north side of Hickory Creek Valley to about the thirtieth mile and about 4 miles north of the town of Mineral; then crosses a low pass in a sand ridge, a distance of 2,500 feet, when Saint Peter's Marsh is entered. The first intention was to turn this sand ridge by passing farther westward on lower and more level ground; but finding the cut through sand ridge would be more than compensated for by the gain in alignment, the latter line was adopted. Had this short cut been contemplated when the line was being carried down Hickory Creek Valley, more elevated ground near the bordering sand ridge would have been traversed, the drop of 6 feet by Lock No. 25 would have been omitted, the former level carried through to Saint Peter's Marsh, and the cut through sand ridge reduced by that depth. Time did not permit rerunning so much of the line, but if construction on this route is undertaken the change suggested is recommended. A lining of concrete is provided through the sand ridge.

The level commencing at the marsh extends through it to Green River, crossing at a point 7 miles north of Annawan on an aqueduct 430 feet long; thence in a general northwesterly course toward Spring Hill, in Whitesides County, crossing the One-hundred-acre Slough and Big Slough; its total length being 16 miles, with but little heavy cutting or embankment.

The water-way under the Green River Aqueduct will, in flood time, operate as an inverted siphon; hence, to provide against the possibility of a rise above canal embankment, an inflow weir, 600 feet long, with a corresponding waste on the lower sides, is contemplated. Before this direct route from Green River to Big Slough was surveyed a line had been run, following down Green River Valley and around the high bordering bluffs, entering the One-hundred-acre Slough a mile south of where the adopted line enters. The entire stretch was remarkably level and favorable for construction, but the distance being about a mile greater than by the other line, economy in construction favors the one adopted.

The Big Slough is crossed at its summit, the waters draining southward into Green River and northward into Rock River.

Earthwork throughout almost the entire length of this level (16 miles) can be economically done by dredging, as water is plentiful.

Where ditches have been excavated in these swamps and sloughs they usually show a few inches of black muck at the surface, resting on a substratum of clayey loam, together about 10 inches thick. Beneath this is either a thick bed of clay or alternating strata of clay and sand, varying in thickness from 1 to 20 or more inches. Not only does this form an impervious bed suitable for canal construction through such localities, but the clay can be utilized for puddling in other adjacent parts of the line.

At Spring Hill the line makes a sharp bend to the west, rounding the hills and entering a bayou at the forty-ninth mile, follows it to Rock River about a quarter of a mile above Fargo's Ferry and one and a half miles south of Erie. This stream would be crossed in a pool formed by a dam to be built about 700 feet below the line, and of sufficient height to maintain the pool at 6 feet above the stage as found at time of survey. Probably 800 acres of low land would be submerged by the pool, and that amount is included in the estimate for damages.

Another bayou entering the river from the west is followed nearly a mile, when the line strikes a direct course across the low flat country between Rock and Mississippi rivers to near the fifty-eighth mile, on the same level as Rock River is crossed.

Near the bayou the Rock Island branch of the Chicago, Burlington and Quincy Railroad is crossed, requiring a slight raise of its grade and the insertion of a pivot-bridge.

At the fifty-eighth mile a 16-foot lift and guard-lock drops the bottom of canal to a depth of 7 feet below low water in the Mississippi where the Marais d'Osier Slough enters. From this lock an open channel would be dredged through the Marais d'Osier and the slough which drains it to the Mississippi opposite the town of Comanche and 2 miles below Albany. The total distance on the line from 7 feet depth of water in

the Illinois to the same depth at low water in the Mississippi is 64 miles. The flood waters would pass freely over this last stretch of the canal without any further detriment than a small deposition of silt. There would be no current to waste the banks or interfere with handling of boats.

Just inside of the railway bridge which carries the Racine branch of the Chicago, Milwaukee and Saint Paul Railway over the Marais d'Osier Slough at its junction with the Mississippi a basin in this slough of about 9 acres area is proposed to be excavated, where complete protection from floating drift and ice is offered. To insure boat-way from canal to river at higher stages of the river pivot-bridges are necessary in both the railway and highway crossings at this point.

Soundings from the terminus of the line around the head of Island No. 294, also southward between the island and mainland, show a minimum depth of 10 feet around the head of the main channel with a 3-foot stage, or 7 feet at low water; but only 9 feet at the same stage near the foot of the island. Hence the full depth of 7 feet could not be had in that direction during low water without some dredging. The soundings are marked in red ink on the accompanying map.

No excavation in rock occurs throughout this entire line.

The field work on this line was completed November 20, when the party was disbanded, and Mr. Taft, with his principal assistants, Mr. John de La Camp, toprographer, and Mr. William Lee, leveler, commenced the preparation of maps, profiles, and estimates.

THE FEEDER BRANCH.

This branch canal, intended also to furnish the necessary water supply for operating the main canal, must enter the latter somewhere on the summit level, and the requirement of the survey for the branch was to find and locate the most feasible route from Rock River to some point on the summit level.

From the survey made by Mr. Low in 1870, it was evident that the most easily accessible point on Rock River of sufficient elevation to supply water to the summit level was the pool formed by the dam at Dixon, Ill., and the survey was commenced at that place.

In its full canal dimensions (same as those of main line) the feeder branch begins with a proposed basin immediately west of the Illinois Central Railway, and between a branch track and Rock River, in the town of Dixon. A channel 30 feet wide and 5 feet deep leads from the basin under the Illinois Central Railroad to the race now supplying water-power to the Dixon Mills. That no damage may result to the water-power, and that at the same time entire control of the water supply to the feeder basin may be had, it is proposed to increase the raceway to 50 feet width and 5 feet depth from its lower end to the pool above the dam in Rock River (a distance of about 400 feet), placing a regulating bulkhead and drift-rack at junction with the river. In the wall on the river side sluice-gates will regulate the amount of water supplied to each consumer. The railway track now traversing the length of this raceway will be maintained in its place, and the entire distance of 400 feet planked over. At the junction of this 50 feet width with that of 30 feet recesses will be provided in the walls on each side for the reception of stop-bars, in order that water-power may be maintained while the canal may be empty, or *vice versa*.

Quite an expensive wall construction along the river bank results from exclusion from a far better location in the river street by the present railway location there.

From the basin the line follows the river to about the eleventh mile, where a sweep to the south carries it over the flat prairie and the Winnebago Swamp to the Green River at New Bedford, 30 miles from Dixon. To avoid much rock-cutting and secure an easy curve around a high rocky bluff at the fifth mile, a heavy riprapped embankment in the river is proposed. This, as well as the canal bank through the first 10 miles, will be carried 2 feet above extreme high water. Almost the entire distance along the river riprap will be necessary to protect the canal bank from high water, and in the eleventh mile sand and gravel are so predominant as to require a concrete lining.

The crossing of the Chicago and Northwestern Railway at the ninth mile requires a slight raising of its grade and a pivot bridge. Similar bridges are necessary at the Rock Falls branch of the Chicago, Burlington and Quincy Railroad, near the twelfth mile, and the Clinton branch of the same road at the twenty-third mile. The latter crossing is about 1½ miles west of Deer Grove Station. The generally flat condition of the country in the Winnebago Swamp region required the running of several trial lines for some distance to determine the best route; and the line formerly located in 1870 was not adhered to strictly after leaving Rock River. Perhaps the route adopted is the best, though by making a greater detour westward less depth of excavation could be had, at the cost of bad alignment, however.

At New Bedford the bed of Green River lies at a depth of about 20 feet below the general surface of the country, and 15 feet below grade of the canal, between not distant banks, affording a good site for crossing on an aqueduct. The length of this structure will be 150 feet.

From New Bedford the line continues in a southerly course to the western terminus of the summit level on the main line at the twenty-fifth mile from the Illinois River, and 4 miles north of Sheffield; the total distance from Dixon being 37.1 miles. A basin, with guard-gate and waste-weir, is provided at the junction.

This part of the survey was completed October 21, and preparation of maps, profiles, and estimates was commenced by General Gilchrist and his chief assistants, Mr. H. W. Lewis, topographer, and Mr. Joseph G. Gilchrist, leveler.

The slope or fall the feeder branch should have to carry the amount of water necessary for operating the canal is arrived at in the following manner:

To determine the maximum quantity expended per day in the lockage of boats, I assume the maximum lockage capacity of a single lock to be 90 boats in twenty-four hours. If this number of boats all passed in one direction through the summit level, their lockage would draw therefrom 180 lockfuls of water. This is not a probable condition of navigation, however, and instead of the movement being all in one direction, it is safe to assume that the ratio of the number of boats passing in one direction to that moving oppositely would not be greater than 2 to 1. On this assumption 150 lockfuls would be the maximum quantity of water drawn from the summit level in twenty-four hours for lockage purposes. Hence, taking a lockage of a 10-foot lift-lock, equivalent to $170 \times 30 \times 10 = 51{,}000$ cubic feet, the maximum quantity drawn from the summit level daily would be $51{,}000 \times 150 = 7{,}650{,}000$ cubic feet.

The daily loss by evaporation, leakage, and percolation may be assumed as a quantity equal to 2 inches in depth over the entire surface of the canal supplied and the feeder. Rankine recommends this as a safe assumption, and M. Graeff, in his treatise on the "Canal du Marne au Rhin," names the same proportional quantity as the result of observations on that and other French canals. If, perchance, this loss should be exceeded in the infancy of the canal, percolations would have decreased so much, on account of sides and bottom being silted over, by the time navigation reached the proportions assumed herein, that less would be expended for lockage during the time of maximum percolation.

Two inches in depth over 1 mile 80 feet wide gives—

$$\frac{5{,}280 \times 80}{6} = 70{,}400 \text{ cubic feet.}$$

Hence, 48 miles of main line (from the first lock to Rock River) and 37 miles of feeder of same width will require $(48 + 37) \times 70{,}400 = 5{,}984{,}000$ cubic feet per day; and the total maximum quantity to be supplied daily is—

	Cubic feet.
For lockage	7,650,000
For evaporation, &c	5,984,000
	13,634,000

or 158 cubic feet per second.

The least sectional area of the feeder branch will be through the aqueduct at Green River, $36 \times 7 = 252$ square feet, requiring a mean velocity of $\frac{158}{252} = 0.627$ foot per second to pass the above maximum supply.

Probably none of the many formulæ expressing a relation between mean velocity, hydraulic mean depth, and slope in open-water channels were derived from actual observations in a channel of the dimensions under consideration, yet we must resort to them for an approximate determination of the slope required in the feeder branch.

Taking Prony's formula;

$$V = (10567.02\ R\ S + .0556)^{\frac{1}{2}} - 0.236,$$

in which

V = mean velocity in feet per second,

R = hydraulic mean depth $\frac{\text{area of section in square feet}}{\text{wetted perimeter in feet,}}$

S = slope = $\frac{\text{vertical fall,}}{\text{horizontal distance,}}$

and substituting for V and R the values 0.627 and $\frac{252}{nd} = 5.04$, respectively, we find the slope S = 0.0000129, or 0.82 inch per mile, corresponding to a fall of $0.82 \times 37 = 30.3$ inches in the total length of feeder.

Substituting similarly in D'Aubisson's formula—

$$V = (8976.5\ R\ S + .012)^{\frac{1}{2}} - 0.109,$$

we find S = 0.0000117, or 0.74 inch per mile, or $0.74 \times 37 = 27.4$ inches fall in total length of feeder.

Eytelwein's formula gives the same result as that of D'Aubisson.

Theoretically, then, a fall of about 29 inches from Dixon to the main line would be sufficient to carry the necessary water supply; but, to be on the safe side, I have adopted a fall of 36 inches in establishing the grade of the feeder. This can be secured without raising the dam at Dixon.

As this dam was built to supply water-power for milling and other purposes at Dixon, the amount of water that would be drawn from the pool for canal purposes becomes a matter of interest to those owning the water-power. Evidently the maximum daily draught on the pool will be less than the maximum of 158 cubic feet required for operating the canal, for the feeder, together with the summit level on the main line, may be regarded as an immense storage reservoir which may be drawn upon in times of maximum navigation, and instead of a daily supply from the river for ninety boats, no doubt a maximum of sixty per day will be ample. The amount for lockage per day on this basis is 5,100,000 cubic feet, and for the entire supply this amount added to loss by evaporation, &c., 5,984,000 cubic feet, making a total of 11,084,000 cubic feet daily, or 128 cubic feet per second.

Mr. Low found by observations at the time of his survey, 1870, that the discharge of Rock River at Dixon was 2,446 cubic feet per second, "at a time, October 11, 1870, when, according to the residents of that city, the river was at its lowest known stage" (see Report of Chief of Engineers, 1871, pages 304 and 305); and I am informed by the proprietors of the Dixon Mills and other reliable residents of the town that so low a stage has not been reached since. Assuming this, of which 128 cubic feet is 5.2 per cent., as the least discharge, we have a maximum of 5.2 per cent. loss to the pool on account of the canal supply, with a certainty of considerably less in ordinary low-water seasons.

It should be remarked that this abstraction from Rock River can be lessened to any desired extent by utilizing other sources of supply along the main line.

Portions of the great swamp area, as traversed between Green and Rock Rivers, could be transformed into large storage lakes at a small cost sufficient to supply the entire reach between those rivers. A dam from 10 to 15 feet high across Green River at New Bedford would form a lake covering much of the Winnebago swamp area, and provide a storage for a large proportion of the rainfall tributary to the Upper Green River Basin. Also a limited supply could be obtained from West Bureau and East Bureau creeks.

MAIN LINE TO WATERTOWN.

Before the survey of the first main line had been completed I received your telegraphic instructions, on November 7, to make a resurvey of the line located by Mr. Gorham P. Low in 1870, under the direction of Col. J. N. Macomb, United States Engineer Corps, from the feeder junction to Watertown, on the Mississippi River; also to run a line to Rock Island, by way of Rock River.

At once a new party, with General Charles A. Gilchrist, in charge, was organized, partly from the scattered members of his former party, with a heavy draught upon the force then completing survey of the Marais d'Osier Route. This party took the field November 13, when, General Gilchrist being called away temporarily, Mr. Joseph G. Gilchrist took charge, with Mr. C. D. Hill, topographer, and Mr. Duane Pennock, leveler.

Commencing at the feeder junction, the line follows, as nearly as practicable, from the meager tracings and reference marks, the route formerly surveyed, crossing to the south side of Hickory Creek Valley, thence across Coal Creek in a westerly direction, over a comparatively level country and good working ground, passing about a mile north of Mineral, Annawan, and Atkinson, and striking Green River at the forty-sixth mile, estimating from the Illinois River. On account of the great drainage from the south towards Green River, the cost for culverts in this reach, and for some miles farther westward is excessive. To provide for flood-waters of the two branches of Mud Creek, crossed at the thirty-fifth and thirty-seventh miles, an arrangement of weirs and guard-gates is provided to carry these streams across the canal during high water, when the culverts for the passage of ordinary stages are insufficient.

Spring Creek, at the forty-third mile, is crossed on an aqueduct 120 feet long. Continuing in the near vicinity of Green River, the line passes 2 miles north of Geneseo, at the forty-ninth mile, entering a long stretch of almost continuous sand from the fiftieth to the fifty-seventh mile, requiring a lining of concrete through a greater portion of the distance. The Y tracks for a railroad siding to Cable's coal mine are crossed just before reaching Green River Station, at the fifty-seventh mile, requiring two pivot bridges and a raise of 2 feet in the grade; also some rock excavation is met with here, as shown by the open work of the coal diggings near by, necessitating a lining of concrete to close up seams in the slaty rock.

At Green River Station a pivot highway bridge will be neccesary on account of the difficulty of making an approach from the north to an elevated fixed bridge. Continuing from this point contiguous to the Chicago, Rock Island and Pacific Railway, and in heavy embankment, the route crosses Green River near the fifty-eighth mile

on an aqueduct 400 feet long, passes through the town of Colona in a deep cut, crossing a branch of the Chicago, Burlington and Quincy Railway at the fifty-ninth mile, requiring a pivot bridge; thence with a sharp turn northward and another to the west, all within a mile, Rock River is crossed on an aqueduct 1,500 feet long, approached by long embankments on either side. The Colona hill being on a substratum of gravel, concrete lining is provided.

Between Rock River and the Mississippi, a rather low, flat depression is followed to Watertown, about 8 miles above Rock Island, crossing the Rock Island branch of the Chicago, Burlington and Quincy Railroad at the sixty-third mile and the Racine branch of the Chicago, Milwaukee and Saint Paul Railroad at the sixty-fourth mile, requiring at each a pivot bridge. The Mississippi is entered through a lock of 10 feet lift, with walls and tail-gate 2 feet higher than extreme high water. To reach the main channel an excavation of about 2 feet in depth must be made in the rocky bed of the river, a distance of nearly a mile around the lower end of Campbell's Island. This will secure only 4 feet depth at extreme low water instead of 7, as is provided in other portions of the canal. As the channel depth over the "rapids" is reduced to about 4 feet at low-water stage, to secure a canal depth of 7 feet at such stage may be regarded as impracticable in this vicinity. There being no safe harbor for boats in the river at this locality, a basin with guard-gates and weir is provided between the railway and river bank. Total length of line is 65.2 miles.

The latter part of this survey was prosecuted under somewhat adverse circumstances. The season being well advanced into the winter, cold winds and snow were prevalent. The field work closed December 28.

Only 48 miles of main line was considered in the determination of maximum quantity of water to be supplied by the feeder branch, as 15 miles of the route via the Marais d'Osier is supplied from Rock River. For the route now under consideration 63 miles must be maintained by the feeder, or 15 miles more than in the former case. In the former calculation it was found that the loss by evaporation, leakage, and percolation was 70,400 cubic feet per mile daily; hence an additional supply of 70,400 by 15 = 1,056,000 cubic feet daily will be demanded from the feeder, or 12 cubic feet per second, which added to 158 cubic feet (the amount required for the Marais d'Osier line) gives 170 cubic feet per second. This requires a mean velocity of $\frac{170}{252} = 0.675$ feet per second in the feeder, and, estimating as for the first line, would require 5.7 per cent. of Rock River discharge at extreme low-water stage.

MAIN LINE TO ROCK ISLAND.

This route branches off southwardly from the Watertown line at the fifty-eighth mile, crossing the Chicago, Rock Island and Pacific Railroad, and entering the bed of Green River before the fifty-ninth mile is reached, follows its channel to Rock River, thence down the latter to Milan, and across the low point of land south of Rock Island to the Mississippi at a point one-half a mile south of the Rock Island corporation line, and 74.5 miles from the Illinois River.

Although coincident with the other route in alignment from the fifty-seventh to the fifty-eighth mile, its elevation is 10 feet lower, avoiding the heavy embankment necessary in the other line to cross Green and Rock rivers above high-water mark. A pivot bridge is required at the crossing above mentioned; also near the sixtieth mile, where a branch of the Chicago, Burlington and Quincy Railroad crosses Green River. Two highway bridges, one near the railroad bridge, the other at the fifty-ninth mile, must be raised and renewed.

The navigation of Green and Rock rivers is made feasible by a succession of pools formed by two new dams, and raising the existing ones at Milan about 3 feet. The first dam is on Green River near the fifty-ninth mile, where a lock of 5 feet lift is provided, the second on Rock River at the sixty-fifth mile, with a lock of 5 feet lift. These dams will cause a submergence of several hundred acres of low land, which item has been considered in the estimate for damages. It is supposed that the construction of a protecting dike from the Milan dam up-stream about a mile, on the left bank, will prevent any further submergence on account of raising the dams. A highway bridge near the sixty-eighth mile will require construction of heavier piers to carry the bridge at a higher elevation than at present, to secure sufficient head room for boats.

Leaving the river at the north dam at Milan, the line enters and follows for a quarter of a mile what is known as Sear's Canal; of sufficient dimensions at the upper end, but requiring an enlargement at the lower end, and a guard lock. Also, two pivot bridges are required here, one to carry the highway and street-car tracks, the other on the line of the Peoria and Rock Island Railroad.

In rounding the bluff after leaving Sear's Canal, some rock excavation is necessary and the cutting is heavy for a distance of nearly a mile. Concrete lining is provided in rock excavation. Two locks of $8\frac{1}{3}$ feet lift each, at the Mississippi River, drop the canal bottom to 7 feet below low water. No basin has been estimated for at this terminus, as it is supposed a good harbor can be found at the foot of Rock Island.

It should be remarked that but few soundings were taken in Rock River, the ice not being strong enough to support a man, but sufficient to prevent the use of a skiff; hence the bottom line as shown on accompanying profile is to a great extent imaginary, though sufficiently accurate for the object in view.

On account of the frozen condition of the ground and a covering of snow at the time of surveying the latter part of this route, the nature of the soil may differ from that assumed in the estimate of cost.

The distance from the Illinois to Green River by this line being 10 miles greater than that from the Illinois to Rock River by the Marais d'Osier route, an additional water supply sufficient to provide for loss from evaporation, &c., for 10 miles of canal must be drawn from the feeder. This equals 70,400 by 10 = 704,000 cubic feet daily, or 8.1 cubic feet per second, requiring a total of 158 + 8 = 166 cubic feet per second, a mean velocity in feeder of 0.659 foot per second, and an abstraction of 5.5 per cent. from extreme low-water discharge of Rock River at Dixon.

LIFT LOCKS.

The lift locks proposed have a chamber area of 170 by 30 feet, with a height of lift varying from 6 to 11 feet. A single exception occurs in the last lock on the Marais d'Osier route, where the lift is 16 feet. In the estimate for cost of these a timber and concrete foundation (in a few instances resting on piling) is contemplated. The chamber walls to be of dressed masonry, backed with concrete, with a sluice-way through the backing for passing water from the upper to the lower level, to supply the lock chamber, and to operate a turbine wheel for maneuvering boats through the lock. The gates to be of timber and operated by hand-power. There is included in the estimate for each lock a house for lock tender.

From the Illinois River to the summit level there are twenty-three locks in a distance of 18 miles, aggregating a total lift of 205 feet and averaging 11.4 feet per mile. From the summit level to the Mississippi by the Marais d'Osier route there are eight locks, aggregating 75 feet lift; by the Watertown route, nine aggregating 86 feet; and by the Rock Island route, 12, aggregating 101 feet lift.

The location of the locks is given on the maps of the different routes, and the lift of each is indicated on the profiles.

CULVERTS.

The necessary culverts are quite numerous on that portion of the line east of the feeder junction, being 42 in number, while only 20 are required on the western slope of the Marais d'Osier route and 46 and 49 on the same slope of the Watertown and Rock Island routes respectively. This disparity in their frequency on the two slopes of the first line is due to the fact that the eastern slope lies mainly in a valley, into which the adjacent country sheds its rainfall, while the western slope lies, to a great extent, on a dividing summit which turns the drainage from or parallel to the line rather than towards it.

The great drainage area south of and tributary to Green River necessitates heavy culvert construction on the Watertown route from the feeder to the Green River crossing.

They vary in size from the simple box to archways of 150 square feet opening, and are of masonry, on a concrete and timber foundation. The desirability of constructing the canal in excess of excavation rather than embankment places its bottom so low that a majority of the culverts are of the inverted siphon form. This is notably the case on the feeder branch.

WEIRS.

Waste-weirs of masonry are provided for discharging surplus water from the different levels and for draining them when required. Similar provision is made on the feeder branch at the eleventh mile and at Green River. Where levels are short, as in many instances on the eastern slope, the arrangement for drainage is omitted in some of them. Special weir constructions are necessary on the feeder branch to take in the water from a depression called Swan Lake at the sixteenth mile, and to discharge it about a mile below. A similar arrangement is provided to take in the water from an old lake (now partially drained by a ditch) near the eastern end of the summit level.

BRIDGES.

Bridges are only provided for carrying public highways and railroads over the canal. Private and farm roads are considered in the estimate for damages. All superstructures are of iron, resting on stone piers and abutments and placed at a minimum height of 15 feet from surface of water in canal to bottom of lower chords of bridges. The span is ordinarily 72 feet, except where the bridges can be conveniently placed on the prolongation of lock walls, when the span is 30 feet.

The number of highway bridges on the Marais d'Osier route is 36, on each of the other two routes 40, and 21 on the feeder branch. All highway bridges are fixed, except the following: One at the Mississippi, on the Marais d'Osier route, where a pivot with two draws of 50 feet each is necessary to pass boats during high water only. Two on the Watertown route, one of which is at Green River station, the other in the town of Colona, and one on the Rock Island line, crossing Sear's Canal near Milan.

Of the five railroad bridges on the Marais d'Osier route, three are pivots, and that on the Racine branch of the Chicago, Milwaukee, and Saint Paul Railroad, near the Mississippi River, has two draws of 50 feet each, to be opened only during high water. On each of the other routes six of the seven railroad bridges required are of the pivot form. The feeder branch requires two fixed and three pivot bridges for railroad crossings.

AQUEDUCTS.

To give free passage for boats such as the locks could accommodate, a width of 36 feet was adopted for the water-way in all aqueducts. They consist of a wooden trunk resting on piers 22 feet apart usually, but are placed 50 feet apart where there is room beneath for special trussing. Their lengths at the different localities are given previously in this report.

RIGHT OF WAY AND SPECIAL DAMAGES.

To include within its limits the slopes of the canal generally, I have assumed 180 feet as the necessary width of the right of way. In making the survey valuable property was avoided where an equally good location could be had on less costly ground. But few buildings of importance are included in the right of way, except at the town of Colona, though damage would result to much property in close proximity to the canal in shutting off the present access thereto. A valuation of from $10 to $100 per acre has been placed upon the land covered by the proposed right of way, and allowance made for contingent damages.

The Chicago, Rock Island, and Pacific Railroad right of way has not been encroached upon except at the crossing at Lepertown, and again where the Rock Island route crosses it, near Green River, though the canal right of way has been made contiguous to that of the railroad for a number of miles on the eastern slope, and again from the fifty-third to the fifty-ninth mile on the Watertown route. This contiguity was necessary in many instances, though frequently adhered to in order that a narrow strip of land might not be inclosed between the railroad and canal right of way.

As before suggested a much better profile and cheaper construction would result at several points by intrenching upon their right of way, and especially would this obtain were the track itself moved in some instances; as at points in the Bureau Creek Valley in the vicinity of Pond Creek Station, from Green River Station westward half a mile, and at Colona. As the damage that would result from such interference would probably more than cover the advantage to construction, any other encroachment upon railroad right of way than that incidental to crossing their line has been avoided, and the crossings are reduced to a minimum for the different routes.

It should be noted here that no allowance has been made in the estimate for damages which would result from the introduction of a pivot bridge into a railroad line.

FENCING.

A barbed-wire fence with five wires and cedar posts is provided for both sides of the canal, except where contiguous to a railroad, when one side will suffice.

PREVENTION OF LEAKAGE.

As previously stated, the greater portion of each route, and the feeder branch, is located in favorably conditioned soil in the matter of securing a reasonably impervious bed for the canal. Not only is a soil rich in clay predominant, particularly on the western slope, but many miles of the Marais d'Osier route lie in a permanently saturated, marshy soil, where any leakage through the bottom at least is absolutely impossible. The same is true of several miles of the Watertown route immediately west of the feeder junction, and through almost half the length of the feeder branch. Where the excavation is in sand or gravel, a special lining of some water tight material must be provided. Different materials have been used for this purpose in canal construction with a good degree of success. The most satisfactory, and in the long run the cheapest, is probably a lining of concrete about 6 inches thick on the bottom, and extending up the side slopes to the water surface, gradually diminishing in thick-

ness to the top, where 4 inches will suffice. A layer of earth at least 10 inches thick should be laid over the concrete to protect it from possible shocks and breakage. In the estimate of cost a lining of this character is provided in the gravel formation at several points in Bureau Creek Valley, through several miles of sand on the Watertown line between Geneseo and the Green River crossing, and at several other points of minor importance on the different lines.

In all cases where the water surface in the canal is above the natural surface of the ground, a vertical wall of puddling, with its base extending below the natural surface, and to be carried up with construction of the embankment, is necessary. No special estimate is made of this item, as material for the puddle is plentiful along the line, and its cost will be but little in excess of ordinary embankment construction.

PROTECTION OF SLOPES.

Riprap is provided in all cases where the outer slope would be subject to wash from an adjacent water-course. The principal localities requiring this protection are along Bureau Creek, at several reaches along Green River, on the Watertown line, and along Rock River, on the feeder branch. For the latter stone could be obtained from the rocky bluff on the river bank at the fifth mile; for the Bureau Creek region the Joliet quarries would probably be the most accessible, while the Green River country could be supplied from the vicinity of Cable's coal mine, near Green River Station.

No protection for the inner slopes is estimated for, as it is impossible to decide where it will be necessary until construction is under way. Although a complete paving of these slopes, from bottom to top, would be necessary to protect them permanently from washing, it is a question whether a cleaning out from time to time of the material carried from the slopes to the bottom would not answer every purpose. Evidently where the canal is in embankment much deterioration of this kind would eventually destroy the bank and some protection would be necessary if erosion were excessive.

BENCH-MARKS.

Distinctly marked benches were established, at intervals of about a mile, on all the lines surveyed. Trees were usually the most permanent objects upon which to place them, though stone walls and abutments were used when practicable. These benches are all located and numbered on the accompanying maps.

MAPS.

The maps accompanying this report are on a scale of 1 inch to 400 feet, and show the transit lines run, topography of the country traversed (in the near vicinity of the lines), location of bench-marks, proposed location of the canal, and the location and number of lift-locks.

It will be observed that the located line deviates materially from the transit line in many instances. By a system of cross-levels and full topography notes, this deviation is made without impairing the accuracy of the estimate for the cost of construction.

In addition to the above maps, a reference map on a smaller scale is submitted showing the location of the lines surveyed. On this map is also shown, in elevation, the proposed arrangement of levels on each route.

PROFILES.

The accompanying profiles show the elevation along the different located lines, and are all referred to the same datum plane, taken 10 feet below the surface of the Illinois River at the eastern terminus of the lines as found at the time of the survey, September 16, 1882. From information from residents, and from the fact that the above date is about the middle of the low-water season, I assumed the observed elevation as that of low-water stage. The elevation of high water was taken from a mark on a warehouse in Hennepin, said to be the high-water mark of 1844. The low-water surface of the Mississippi at the Marais d'Osier terminus was adopted after inquiry of residents of Comanche, opposite, and of Albany, 2 miles above. There being no water-gauge in the vicinity, I was restricted to this rather uncertain information. For the high and low water elevations at the western terminus of the other two routes, as referred to the gauge at Rock Island, I am indebted to the United States engineer office at Rock Island. Connection being made between our levels and the Rock Island gauge, the elevation of high and low water at the points named were readily transferred to the Hennepin Canal levels. They are given on the profiles.

ESTIMATES OF COST.

Detailed estimates for cost of construction are given for each mile section for each route, and the feeder branch, on the four estimates sheets herewith.

In order to condense these somewhat, the price and quantity of materials are not generally given. I note below the prices used for some of the principal material, to wit:

	Per cubic yard.
Dressed masonry	$13 50
Rubble masonry	10 00
Paving	6 00
Riprap	3 00
Concrete	6 00

	Per M feet, B. M.
Timber, oak	$60 00
Timber, pine	40 00
Timber, hemlock	30 00

It is presumed that all the stone for dressed masonry would be supplied from the quarries at Joliet, Ill., as would the lower grades of stone for the eastern end of the work. In the vicinity of Rock Island the lower grades could be had in abundance, and some could be supplied from the vicinity of Cable's coal mines on Green River. The gravel and sand so prevalent on portions of the line could be utilized in making concrete. The prices for stone and concrete are based on the above facts.

Reference to the estimate sheets shows a marked difference in the cost per mile on different portions of the routes. For example, the first 25 miles from the eastern terminus averages $98,074.77 per mile, while from the feeder junction to the Mississippi, on the Marais d'Osier route, the cost is only $43,360.12 per mile. On the Watertown and Rock Island routes, from the same point to the Mississippi, the figures are $76,906.97 and $51,654.62 per mile, respectively, and on the feeder branch $44,854.42.

The following statement gives the comparative estimated cost of the three routes:

Comparative estimates of cost of the three routes.

Subject of expenditure.	Marais d'Osier.	Watertown.	Rock Island.
Earth-work	$1,024,808 75	$1,142,367 95	$1,028,844 75
Lift-locks	1,393,350 50	1,435,690 23	1,605,270 00
Culverts	184,262 03	318,021 09	340,231 09
Weirs	89,964 15	46,109 20	108,165 10
Bridges, railroad	35,942 54	57,851 54	68,919 54
Bridges, highway	150,497 75	167,160 25	180,560 25
Aqueducts	391,212 81	736,713 39	327,339 39
Concrete	133,056 00	376,992 00	376,992 00
Right of way	134,050 00	132,820 00	143,530 00
Fencing	37,600 00	37,142 00	36,960 00
Special work	190,482 72	588,704 50	336,617 92
Total	3,770,227 25	5,039,572 15	4,553,430 14
Contingencies, 10 per cent	377,022 73	503,957 21	455,343 01
Aggregate	4,147,249 98	5,543,529 36	5,008,773 15
Feeder branch	1,664,117 52	1,664,117 52	1,664,117 52
Total	5,811,367 50	7,207,646 88	6,672,890 67

LIST OF MAPS, PROFILES, AND ESTIMATE SHEETS.

The following maps, &c., are submitted herewith, viz:

(1) A map, on a scale of 1 inch to 2 miles, showing location of the three routes and feeder branch, and profiles of the proposed levels on the different routes.

(2) Topographical map, on scale of 1 inch to 400 feet, showing lines of survey and location, and comprising the following eight sheets:

Sheet A.—From the Illinois River to the feeder junction.

Sheet B.—From the feeder junction to Rock River on the Marias d'Osier route.

Sheet C.—From Rock River to the Mississippi on the Marias d'Osier route.

Sheet D.—From the feeder junction to Spring Creek on the Watertown route.

Sheet E.—From Spring Creek to Mississippi River on the Watertown route.

Sheet F.—From Green River Station to the Mississippi River on the Rock Island route.

Sheet G.—From Dixon to the twentieth mile on the feeder branch.
Sheet H.—From the twentieth mile on the feeder branch to the main line.
(3) Profiles of the different located lines, including the following five sheets:
Sheet No. 1.—From the Illinois River to the feeder junction.
Sheet No. 2.—From the feeder junction to Mississippi River on the Marias d'Osier route.
Sheet No. 3.—From the feeder junction to Mississippi River on the Watertown route.
Sheet No. 4.—From Green River Station to Mississippi River on the Rock Island route.
Sheet No. 5.—The feeder branch.
(4) Tabular statements of the estimated cost for construction, in mile sections, of the three routes and feeder branch separately, on four sheets.

CONCLUSION.

The information resulting from the surveys indicates that either of the routes, for a canal of the proposed dimensions with a water supply from the feeder branch, is entirely feasible in so far as construction is concerned, if we except the impracticability of obtaining an entrance of 7 feet depth to the Mississippi at Watertown.

That the Marias d'Osier route has the advantage as to first cost over either of the others; and that this route, traversing about 26 miles of constantly saturated soil, west of the feeder junction, presents an economy in leakage through its bottom not enjoyed by either of the other routes. Other characteristics of minor importance in determining "the most practicable and convenient route" might be mentioned, but one of the leading considerations in deciding upon the proper route being with reference to commercial rather than engineering advantages, I make no further comparisons.

Before closing this report I wish to note my appreciation of the able and zealous manner in which the gentlemen in charge, as well as each member of the survey parties, performed the duties assigned them, and to acknowledge the diligent and skillful assistance rendered by the engineers employed in the preparation of the estimates for cost of construction, and the maps and profiles herewith.

I have the honor to be, very respectfully, your obedient servant,

H. B. HERR,
Assistant Engineer.

To Maj. W. H. H. BENYAURD,
Corps of Engineers, U. S. A.

SURVEY AND ESTIMATES FOR ENLARGEMENT OF THE ILLINOIS AND MICHIGAN CANAL.

REPORT OF MR. GEORGE Y. WISNER, ASSISTANT ENGINEER.

UNITED STATES ENGINEER OFFICE,
Chicago, Ill., January 22, 1883.

MAJOR: I have the honor to submit the following report of survey and estimates for enlargement of the Illinois and Michigan Canal, from Chicago to the Illinois River at La Salle.

In compliance with your instructions of October 3, 1882, I have made a careful survey of the canal, and determined cross-sections at intervals of 500 feet throughout its entire length.

These cross-sections have been platted and may be utilized for computing cost of enlargement in case any other size of prism of canal should finally be adopted than that now proposed.

The canal property consists of a strip of land 240 feet in width (90 feet each side of canal), with a few exceptions through villages and across the sixteenth sections of townships.

For about 15 miles from Chicago the cutting for canal is principally through clay, and for a larger portion of the next 20 miles the canal is cut through limestone rock. The remainder of the route is through clay and sand loam, with occasional beds of rock and gravel.

A large amount of material needed for construction may be obtained on the canal property, which, with the extensive quarries adjacent to the canal near Lockport, renders the cost of enlargement very reasonable. The present canal is a little over 60 feet wide at surface, and of irregular section, averaging about 390 square feet sectional area.

The locks are 110 feet long, 18 feet wide, and 6 feet deep on miter-sills.

The following estimates have been made for prism of canal similar in size to that proposed for the Hennepin Canal, viz, 80 feet wide at surface, 59 feet wide at bottom, and 7 feet deep, with locks 170 feet long, 30 feet wide, and 7 feet deep on miter-sills. The sectional area will be 485 square feet, or about 25 per cent. larger than that of the present canal.

The new pumping works now being erected at Bridgeport are expected, when completed, to deliver in canal about 1,000 cubic feet of water per second, which will make a mean velocity of current in the present section of canal of about 1.7 miles per hour, and for the proposed section 1.4 miles per hour. With a loaded boat occupying a large portion of this cross-section, the current will be much too heavy for economy of transportation, and if the canal is to be used as an outlet for Chicago sewage, I think the prism should be made much larger than that now proposed.

The water-supply for the present canal will be ample. No survey was made of the feeders, but from information obtained I think they are in about the same state of repair as the present canal.

It is expected to obtain the increase of depth in canal from Chicago to the Du Page River by dredging, but from the Du Page River to La Salle it will be much more economical to raise the height of water in the levels 1 foot, thus saving a large amount of excavation. The excavation being in excess of the amount of embankment required, no extra expense will be incurred by raising the banks.

No changes have been made in the location of locks. The estimates for material in locks have been made for cut stone for face of walls and culverts, and uncut stone for remainder of masonry.

Feed-culverts are to be built through the lock-walls, for regulating the flow of water in canal, and the foundations to be of concrete except where lock-walls are built directly on the native rock. The aqueducts on the line at present have wooden trunks about 24 feet in clear width, supported on stone abutments and piers.

Estimates have been made for repair of masonry, and for new trunks to correspond in size with the proposed enlargement.

All bridges less than 15 feet in the clear above water in the canal should be raised. The abutments for several of the bridges will have to be rebuilt.

The stone arch-culverts under the present canal will need no alterations, but there are twelve wooden box-culverts which should be replaced by stone ones.

Through sand, loam, and gravelly soils, slope-walls will be required to protect the banks from caving. The canal should also be fenced for a greater part of its length.

Estimates have been made for waste-weirs, with gates at Lockport and at Marseilles, which, with surface-weirs on the longer levels for escape of water from heavy rains, will be sufficient for regulating the height of water in canal. The dams in Des Plaines River at Joliet, and in the Du Page River, will need no repairs at present.

The accompanying profile shows the elevation of ground with reference to water surface of present canal. The curves showing the amount to be excavated are platted from ordinates representing the number of square yards in the respective sections. The mean ordinate for any section multiplied by the length of section in yards will equal the number of cubic yards of excavation required.

There are seventeen locks and watchmen's houses belonging to the canal property, nine of which have been built within the past five years, and the others have been recently repaired.

I am under obligations to Mr. William Thomas, superintendent of Illinois and Michigan Canal, for valuable information furnished from the canal office, and also to Mr. John Ericson for able assistance in both field and office work.

Very respectfully submitted.

GEORGE Y. WISNER,
Assistant Engineer

Maj W. H. H. BENYAURD,
Corps of Engineers, U. S. A.

Detailed estimate for locks.

Number of locks.	Lift of locks.	Bailing and draining.	Removing old timber.	Excavation.			Embankment, at 20 cents.	Lining, at 50 cents.
				Earth, at 25 cents.	Rock, at $1.75.	Old masonry, at $1.50.		
	Feet.			*Cu. yds.*	*Cu. yds.*	*Cu. yds.*	*Cu. yds.*	*Cu. yds.*
1	10	$500	$100	3,600	275	1,840	3,300	200
2	10	500	100	3,600	275	1,840	3,300	200
3	10	500	100	3,600	275	1,840	3,300	200
4	10	500	100	3,600	275	1,840	3,300	200
5	10	1,200	100	3,900	275	1,840	2,900	200
6 (guard)	0.5	1,500	100	2,300	275	820	930	150
7	12	1,000	100	4,700	.....	2,050	4,500	200
8	3	1,200	100	3,200	.....	1,250	1,700	200
9	6.5	500	100	2,950	250	1,500	2,100	200
10	8.5	500	100	3,300	250	1,690	3,000	200
11	8.5	500	100	3,300	250	1,690	3,000	200
12	10	500	100	3,600	250	1,840	3,300	200
13	9	500	100	3,730	.....	1,780	3,100	200
14	6.5	500	100	3,350	.....	1,500	2,100	200
15	13.5	500	100	4,700	.....	2,250	4,500	200
16	12	1,200	100	4,700	.....	2,010	4,400	200
Total quantities	.....	.....	.....	57,830	2,650	27,580	48,730	3,150
Total cost	.....	11,100	1,160	$14,457 50	$4,637 60	$41,370	$9,746	$1,575

Number of locks.	Puddling, at 25 cents.	Paving, at $3.	Masonry.				
			Cut stone, at $12.	Uncut stone, at $6.	In culverts, at $12.	Vertical walls, at $5.	Concrete, at $5.
	Cu. yds.	*Cu. yds.*	*Cu. yds.*	*Cu. yds.*	*Cu. yds.*	*Cu. yds.*	*Cu. yds.*
1	225	60	820	1,890	100	420	390
2	225	60	820	1,890	100	420	390
3	225	60	820	1,890	100	420	390
4	225	60	820	1,890	100	420	390
5	225	60	820	1,890	100	850	390
6 (guard)	225	60	430	830	100	270	390
7	325	60	930	2,140	100	440	830
8	300	60	550	1,180	100	400	830
9	225	60	680	1,460	100	410	390
10	225	60	780	1,650	100	410	390
11	225	60	780	1,650	100	410	390
12	225	60	820	1,890	100	420	390
13	225	60	800	1,760	100	420	830
14	325	60	680	1,460	100	410	830
15	325	60	970	2,250	100	450	830
16	325	60	930	2,140	100	430	830
Total quantities	4,175	960	12,450	27,860	1,600	7,000	8,880
Total cost	$1,043 75	$2,880	$149,400	$167,160	$19,200	$35,000	$44,400

Detailed estimate for locks—Continued.

Number of locks.	White-oak timber and plank, at $60 per 1,000 feet.	Pine timber and plank, at $40 per 1,000 feet.	Snubbing post, at 50 cents per linear foot.	Iron.			Lead, at 12 cents.	Painting.	Value of material in old locks.	Amount.
				Wrought, at 10 cents.	Cast, at 7 cents.	Spike, at 5 cents.				
	Ft., B.M.	*Ft., B.M.*	*Lin. ft.*	*Lbs.*	*Lbs.*	*Lbs.*	*Lbs.*			
1	15,000	3,000	100	7,100	5,500	300	200	$60	$6,000	$28,431 50
2	15,000	3,000	100	7,100	5,500	300	200	60	6,000	28,431 50
3	15,000	3,000	100	7,100	5,500	300	200	60	6,000	28,431 50
4	15,000	3,000	100	7,100	5,500	300	200	60	6,000	28,431 50
5	15,000	3,000	100	7,100	5,500	300	200	60	6,000	31,201 50
6 (guard)	9,600	3,000	100	6,500	5,000	300	200	40	2,700	17,648 50
7	15,100	3,000	100	7,200	5,500	300	200	65	6,500	33,946 25
8	11,000	3,000	100	6,700	5,200	300	200	45	4,100	23,548 00
9	12,500	3,000	100	6,900	5,400	300	200	50	5,000	23,978 25
10	14,000	3,000	100	7,000	5,500	300	200	55	5,600	26,382 75
11	14,000	3,000	100	7,000	5,500	300	200	55	5,600	26,382 75
12	15,000	3,000	100	7,100	5,500	300	200	60	6,000	28,387 75
13	14,500	3,000	100	7,000	5,500	300	200	55	5,800	29,212 75
14	12,500	3,000	100	6,900	5,400	300	200	50	5,000	25,865 75
15	16,000	3,000	100	7,300	5,600	300	200	66	7,000	34,508 25
16	15,100	3,000	100	7,200	5,500	300	200	65	6,500	34,016 25
Total quantities	224,300	48,000	1,600	112,300	87,100	4,800	3,200	.....	.....	.....
Total cost	$18,458	$1,920	$800	$11,230	$6,097	$240	$384	906	89,800	448,804 75

Detailed estimate for section work.

No. of section.	Excavation.		Slope and vertical wall, at $1.50.	Fencing, at $300 per mile.	Puddling, at 25 cents.	Repair of abutments and raising of bridges.	Amount.
	Earth, at 20 cents.	Rock, at $1.75.					
	Cu. yds.	*Cu. yds.*	*Cu. yds.*	*Miles.*	*Cu. yds.*		
1	13,193	.....	.....	2	.....	.....	$3,238 60
2	17,330	.....	.....	2	.....	.....	4,066 00
3	18,712	.....	.....	2	.....	$400	4,742 40
4	28,083	.....	.....	1.5	.....	400	6,466 60
5	27,053	.....	.....	1	.....	.....	5,710 60
6	22,935	.....	.....	1	.....	.....	4,887 00
7	22,589	.....	.....	1	.....	.....	4,817 80
8	17,526	.....	.....	1	.....	*2,500	6,305 20
9	17,767	.....	1,920	1	.....	.....	6,733 40
10	32,434	.....	3,910	1	.....	.....	12,651 80
11	20,987	.....	3,910	1	.....	.....	10,262 40
12	21,428	.....	3,910	1	.....	*2,500	12,950 60
13	25,377	.....	3,910	1	.....	400	11,640 40
14	34,449	.....	3,910	1	.....	.....	13,054 80
15	50,002	387	3,910	1	.....	.....	16,842 65
16	27,791	21,918	300	.....	.....	400	44,764 70
17	27,952	10,698	.....	.....	.....	.....	24,311 90
18	28,530	13,410	1,000	1.5	.....	.....	31,123 50
19	20,444	.....	3,700	2	.....	.....	10,238 80
20	7,080	31,706	400	.....	.....	.....	57,501 50
21	995	40,523	.....	.....	.....	200	71,314 20
22	.....	27,159	.....	.....	.....	.....	47,528 25
23	3,461	34,608	.....	.....	.....	400	61,656 25
24	9,626	29,961	.....	.....	.....	.....	54,356 90
25	10,554	32,334	.....	.....	.....	.....	58,695 35
26	12,289	34,702	.....	.....	.....	.....	63,186 30
27	10,412	30,402	2,280	.....	.....	.....	58,705 90
28	21,045	6,696	3,910	2	.....	.....	22,392 00
29	15,873	2,164	3,910	.....	.....	.....	12,826 60
30	7,643	7,132	3,660	.....	.....	.....	19,499 90
31	34,617	.....	3,910	2	.....	.....	13,388 40
32	29,099	10,641	3,570	2	.....	.....	30,396 50
33	26,722	3,313	2,300	.....	.....	.....	14,592 15
34	8,404	2,281	.....	.....	.....	400	6,072 35
35	18,491	24,483	3,910	.....	400	*3,500	56,008 45
36	11,516	10,270	2,200	2	1,500	400	24,950 75
37	6,232	.....	2,640	2	3,600	.....	6,706 40
38	2,646	.....	1,900	2	3,600	.....	4,879 20

* Railroad.

Detailed estimate for section work—Continued.

No. of section.	Excavation.		Slope and vertical wall, at $1.50.	Fencing, at $300 per mile.	Puddling, at 25 cents.	Repair of abutments and raising of bridges.	Amount.
	Earth, at 25 cents.	Rock, at $1.75.					
	Cu. yds.	*Cu. yds.*	*Cu. yds.*	*Miles.*	*Cu. yds.*		
39	4,569		1,900	2	1,000	$400	$5,013 80
40	23,641		3,530	2	3,600		11,553 20
41	21,589		3,910	2	3,600	400	12,082 80
42	28,794		3,910	2	3,600		13,123 80
43	15,707		2,930	1.5	100		8,011 40
44	6,259		1,950	1			4,476 80
45	19,557		3,900	0.5	3,600	500	11,311 40
46	24,814		3,100	1.5	700	1,750	11,987 80
47	9,318		3,919	2	500		8,453 60
48	17,107		3,910	1	1,200		9,886 40
49	11,075		3,910	1	3,600		6,280 00
50	9,656		3,910	1	1,400		8,446 20
51	13,809		2,320	2	3,000		7,591 80
52	28,302		3,550	2	800	1,750	13,535 40
53	16,256		2,680	2	500		7,996 25
54	30,057		3,370	2	900	1,750	13,611 40
55	25,828		3,910	2			11,630 60
56	23,723		3,910	2	3,000		11,959,60
57	27,896		3,910	2	3,600		12,944 20
58	21,193		3,910	2	1,000	1,750	12,703 60
59	18,654		3,100		600		8,530 80
60	19,215		3,000	1	3,200	1,750	11,193 00
61	20,852		3,910	2	3,500	1,800	13,310 40
62	23,021		3,910	2	3,300		11,894 20
63	23,242		3,910	2	500		11,238 40
64	19,807		3,910	2	400		10,526 40
65	24,634		3,910	2	600	1,800	13,341 80
66	25,615		3,910	2	600		11,738 00
67	24,896		3,910	2			11,444 40
68	33,902		3,910	2	800		13,445 40
69	23,924		2,680	2	1,000		9,654 80
70	35,466		3,200	1		1,700	13,863 20
71	31,665		3,910	2	600		12,984 00
72	34,971		3,910	2	700		13,634 20
73	28,030		3,910	2	1,000		12,321 00
74	23,576		3,800	2	300		11,090 20
75	20,410		3,200	1		1,700	10,882 00
76	28,981		3,910	2	500	1,750	14,136 20
77	4,234		1,950	2	200		4,421 80
78	18,148		3,910	2	300		10,169 60
79	26,906		3,910	2			11,846 20
80	31,745		3,910	2			12,814 00
81	25,172		3,910	2		1,750	13,249 40
82	7,492		950	1			3,223 40
83	9,683					1,750	3,686 60
84	22,261		3,600	2		1,800	12,252 20
85	16,522		3,900	2	300		9,829 40
86	12,777		2,680	1	600	1,750	8,775 40
87	17,213		3,180	1			8,512 60
88	7,049		1,950	1	200		4,684 80
89	10,378		2,680	2	300		6,770 60
90	24,831		3,910	2	200		11,481 20
91	31,260		3,910	2	300		12,792 00
92	23,037	6,147	3,700	1	400	1,750	23,064 65
93	12,503		3,910	1	400		8,765 60
94	22,672		3,100	1	200		9,534 40
95	22,743	2,390	1,800	1	300		11,806 10
96	21,483		3,800	1			10,296 60
97	12,856						2,571 20
97½	3,562						712,40
Total quantities	1,935,825	383,325	259,880	127.5	66,100		
Total cost	$387,165	$670,818.75	$389,820	$38,250	$16,525	39,100	1,541,678 75

Estimated cost for aqueducts.

Location.	Removing old structure and repairing masonry.	Lumber and plank.		Iron.		Amount.
		Oak, at $60 per 1,000 ft., B. M.	Pine, at $4 per 1,000 ft., B. M.	Spike and nails, at 5 cents per pound.	Wrought, at 10 cents per lb.	
		Feet, B. M.	*Feet, B. M.*	*Pounds.*	*Pounds.*	
Au Sable River	$1,000	69,700	24,400	700	4,900	$6,683 00
Nettle Creek	500	25,000	8,700	300	1,750	2,538 00
Fox River	2,500	236,400	82,650	2,400	16,600	21,770 00
Little Vermillion River	1,200	89,600	31,300	900	6,300	8,503 00
Total quantities	.....	420,700	147,050	4,300	29,550	.....
Total cost	.....	$25,242 00	$5,882 00	$21,500 00	$2,955 00	39,494 09

Estimated cost for culverts.

[Length of chord, 4 feet.]

Items.	Price.	Amount.
Bailing and draining, 12 culverts	$200 00	$2,400 00
Removing old timber	25 00	300 00
Excavation, 9,000 yards.....per yard	20	1,800 00
Embankment, 7,200 yards.....do	20	1,440 00
Masonry in arch, 720 yards.....do	12 00	8,640 00
Masonry in walls, 1,260 yards.....do	5 00	6,300 00
Masonry in concrete, 720 yards.....do	5 00	3,600 00
Hemlock timber, 102,000 feet.....per 1,000 feet	30 00	3,060 00
Spike, 1,200 pounds.....per pound	05	60 00
Total cost of culverts	.....	27,600 00

Estimated cost for waste weirs.

[Waste weir at Lockport: Length, 100 feet; number of openings, 5.]

Items.	Price.	Amount.
Bailing and draining	$200 00	$200 00
Earth excavation, 1,500 yards.....per yard	20	300 00
Embankment, 300 yards.....do	20	60 00
Puddling, 200 yards.....do	25	50 00
Masonry in arch, 25 yards.....do	12 00	300 00
Masonry in walls and abutments, 540 yards.....do	6 00	3,240 00
Masonry in concrete, 200 yards.....do	5 00	1,000 00
Paving, 100 yards.....do	3 00	300 00
3,300 feet, B. M., oak timber.....per M	60 00	198 00
4,000 feet, B. M., pine timber and plank.....do	40 00	160 00
10,000 feet, B. M., hemlock timber.....do	30 00	300 00
Wrought-iron, 500 pounds.....per pound	10	50 00
Cast-iron, 1,500 pounds.....do	07	105 00
Spike and nails, 200 pounds.....do	05	10 00
Total	.....	6,273 00

Estimated cost for waste weirs—Continued.

[Waste weir at Marseilles: Length, 25 feet; number of openings, 3.]

Items.	Price.	Amount.
Bailing and draining	.....	$100 00
Earth excavation, 300 yards ..... per yard..	$0 20	60 00
Earth embankment, 200 yards ..... do....	20	40 00
Puddling, 100 yards ..... do....	25	25 00
Masonry in arch, 15 yards ..... do....	12 00	180 00
Masonry in walls and abutments, 175 yards ..... do....	6 00	1,050 00
Masonry in concrete, 100 yards ..... do....	5 00	500 00
Paving, 50 yards ..... do ...	3 00	150 00
Oak timber, 500 feet, B. M ..... per 1,000 feet..	60 00	30 00
Pine timber and plank, 2,000 feet, B. M ..... do....	40 00	80 00
Hemlock, 3,000 feet, B. M ..... do....	30 00	90 00
Wrought-iron, 300 pounds ..... per pound..	10	30 00
Cast-iron, 800 pounds ..... do....	07	51 00
Spike and nails, 100 pounds ..... do....	05	5 00
Total	.....	2,396 00

[Four waste weirs: Length of each, 50 feet.]

Bailing and draining	$50 00	$200 00
Earth excavation, 2,000 yards ..... per yard..	20	400 00
Embankment, 600 yards ..... do....	20	120 00
Puddling, 400 yards ..... do....	25	100 00
Masonry in walls and abutments, 600 yards ..... do....	5 00	3,000 00
Masonry in concrete, 120 yards ..... do....	5 00	600 00
Pine timber and plank, 10,000 feet, B. M ..... per 1,000 feet..	40 00	400 00
Hemlock, 28,000 feet, B. M ..... do....	30 00	840 00
Spikes and nails, 400 pounds ..... per pound..	05	20 00
Total	.....	5,680 00
Total cost of waste weirs	.....	14,349 00

Summary.

Items.	Amount.	Total.
Section work	$1,541,678 75	
Locks	448,804 75	
Aqueducts	39,494 00	
Culverts	27,600 00	
Waste weirs	14,349 00	
Steam dredge	18,000 00	
		$2,089 926
Add 10 per cent. for contingencies	.....	208,992
Grand total	.....	2,298,919

COMMERCIAL STATISTICS AND GENERAL CONSIDERATION OF THE BENEFITS TO BE DERIVED BY THE CONSTRUCTION OF THE CANAL BETWEEN THE MISSISSIPPI AND THE LAKES.

The construction of a canal to connect the waters of the Upper Mississippi with those of the lakes, by way of the Illinois and Michigan Canal, has long been earnestly desired by the people occupying the vast area lying west of Chicago, and seeking improved channels of communication with that city and the East. Four times—in 1864, 1870, 1874, and 1882, respectively—has the general assembly of Iowa, by concurrent action on the part of each of its branches, specifically memorialized Congress for the opening of such a canal by the General Government. The legislature of Illinois has also similarly addressed its appeal to Congress repeatedly, the last occasion being that of the special session of that body last year. These two States, thus speaking through their representatives, embraced more than 5,000,000 of people. Their expression of opinion and desire have been earnestly supported, too, by resolutions adopted by such boards of trade as those of Saint Paul, La Crosse, Duluth,

Davenport, Rock Island, and Chicago in the Northwest, and those of Buffalo, Syracuse, and New York in the East, and by the resolution of the senate branch of the New York assembly last May, which would have been concurred in by the house had the session had two days' longer continuance. In the city of New York, particularly, not only the board of trade and transportation, but the "produce exchange," a body numbering in its membership nearly three thousand of the produce commission and other business men of that city, have addressed Congress in urgent appeals in behalf of the canal in question, usually denominated the "Hennepin Canal." In May, 1881, there assembled at Davenport, Iowa, a delegate body of about four hundred members, representing commercial bodies, municipal corporations, and farmers' associations of seven different States, expressly to urge upon the attention of the country the desirability of, and necessity for, the construction of the said canal by the General Government. That convention, attended and addressed by governors of States, members of Congress, and prominent business men, emphatically urged upon Congress the great importance of the proposed canal as a means to secure to the people a greatly needed improvement of facilities for the transportation of their products and commodities.

The reasons which have been and are presented in support of this action and these appeals may be summarized:

1. Cheap transportation to the East is even more an absolute necessity to the Upper Mississippi Valley than is such transportation to the South. In the direction of securing the latter very much has been done during the past fifteen years. The improvement of the Rock Island and the Des Moines Rapids, the removal or the reduction of numerous sand-bars, &c., and the construction of the jetties at the mouth of the river have each been of great advantage to those whose products seek a Southern market, or can be transported to Europe by way of New Orleans. But it is urged that, after all, the main arteries of commerce flow from the West to the East and from the East to the West. Several co-operative causes are responsible for this:

a. The greater shipping ports of European markets are on the Eastern Atlantic seaboard, for to these are made the larger number of imports, so that the vessel leaving thence laden with cereals provisions from the West can offer to these cheaper freightage, because sure of return cargoes at rates which are the most remunerative as a result of the shorter ocean voyage, as compared with that required from ports more distant from Liverpool, or London, or Bremen.

b. In the East are the manufacturing centers and the populous cities, the necessities of which make constant demand for the grains and breadstuffs, the meats, and the dairy products of the Northwest. From the East, also, the Northwest most largely draws its supplies of manufactured articles, machinery, staple goods, &c.

c. In the East are the strong competitors for the products of the Northwest, the markets at Baltimore, Philadelphia, New York, Boston, Portland, Montreal, and Quebec, which are not only connected with the Northwest by the great trunk railroad lines which stretch from Chicago to the ocean, but which enjoy also more or less directly the free use of the lakes, the Erie or the Welland Canal, the Hudson, or the Saint Lawrence.

These and other notable facts press upon attention the truth that if the Upper Mississippi Valley is to at all attain the development so unmistakably promised in the wealth of its resources and the energies of its people, it must have opportunities for transportation of its products and commodities which shall be equally direct and inexpensive eastward or southward.

2. It is the particular misfortune of the Upper Mississippi Valley that it has no share in the vast benefits which accrue to the lake region in the matter of competition and cheap transportation, secured through the use of a water route which has its westward terminus at Chicago and its eastern in New York Harbor. The potency of the competition in freight charges maintained by the water route of the lakes, the Erie Canal, and the Hudson stands confessed. Yet the striking facts pertaining thereto are worthy of special reference here. Thus, in a letter to Hon. William Windom, United States Senator for Minnesota, Mr. Albert Fink, the well-known railroad commissioner, wrote in 1878: * * * "You are aware that when the rates are reduced between Chicago and New York on account of the opening of the canal, this reduction applies not only to Chicago, but to all interior cities (Saint Louis, Indianapolis, Cincinnati) to New York. If that was not the rule, the result would be that the roads running, say, from Saint Louis, Indianapolis, and Cincinnati to Chicago would carry the freight to Chicago, from which point low rates would take it to the East, and leave the direct road from the interior points to the seaboard without any business. Hence, whenever the rates are reduced on account of the opening of navigation from Chicago and lake ports, the same reduction is made to all interior cities, not only to New York, where the canal runs, but to Philadelphia and Baltimore. Although the latter cities have no direct water-route communication with the West, yet they receive the benefit, as far as railroad rates are concerned, the same as if a canal were running from the lakes direct to these cities, because whenever rates from Chicago to New York are reduced it is necessary to reduce the rate from Chicago to Boston, Philadelphia, and Baltimore;

otherwise the business would all go to New York. The reduction of the rates from Chicago and Saint Louis to Baltimore causes a reduction in rates on shipment via Baltimore to Atlantic ports—Norfolk, Wilmington, Port Royal, Savannah, Brunswick, and Fernandina—and from there into the interior Atlantic Gulf States—Augusta, Atlanta, Macon, Montgomery, Selma, &c. * * * These roads * * * are obliged to follow the reduction made via the Baltimore road, and which were primarily made on account of the existence of the Erie Canal and the opening of navigation. The same way in regard to the west-bound business, * * * so that it may be said that the rail rates are kept in check by water transportation."

Were it necessary so to do, such citations of eminent authority as is thus quoted might be multiplied indefinitely. But, while this potential influence of the water-route competition of the lakes and of the Erie Canal is widely felt at Chicago and all over the country eastward and southward from Chicago, its westward trend practically ends at Chicago. It so ends at Chicago, so far as the Upper Mississippi Valley is concerned, because there is no water-route open to the Upper Mississippi by which Chicago and the lakes can be reached. It is to meet that difficulty that the Hennepin Canal is necessary. In a word, the construction of the Hennepin Canal and the use of the Illinois and Michigan Canal will extend to the Upper Mississippi River the water-route competition in freight charges now terminating westward at Chicago.

3. The great gain to the entire region west of Chicago to result from the extension to the water-route competition and cheapness to which attention has been directed may be approximately estimated on comparison of railroad freight charges on lines of commerce with which water routes of transportation come into competition and those on which no such competition is known.

The reports of the leading trunk lines, collated by Mr. Joseph Nimmo, jr., in a table illustrating the successive reduction of freight charges on those roads and on the Erie Canal, respectively, furnish striking evidence on this point. (Internal Commerce of the United States for 1880, Appendix, page 230.)

Of twelve of the railroads therein enumerated maintaining an average freight charge of from 1.85 to 3.168 cents per ton per mile, respectively, in 1868, the only ones maintaining for the year 1880 an average freight charge of .88 of a cent per ton per mile were those having no water-route competition. This is a summary of that exhibit as to the charges for 1880 per ton per mile:

RAILROADS HAVING COMPETITION IN WATER ROUTES.

	Per ton per mile.
New York Central Railroad	$0 00.88
Pennsylvania Railroad	00.88
New York, Erie and Western Railroad	00.84
Philadelphia and Erie Railroad	00.56
Lake Shore and Michigan Southern Railroad	00.75
Michigan Central Railroad	00.842
Pittsburgh and Fort Wayne Railroad (for 1879—for 1880 not given)	00.76

RAILROADS NOT COMPELLED TO MEET WATER-ROUTE COMPETITION.

	Per ton per mile.
Boston and Albany Railroad	$0 01.20
Chicago, Burlington and Quincy Railroad (for 1879—for 1880 not given)	01.023
Chicago and Northwestern Railroad (for 1879—for 1880 not given)	01.49
Chicago, Milwaukee and Saint Paul Railroad (for 1879—for 1880 not given)	01.76
Chicago, Rock Island and Pacific Railroad (for 1879—for 1880 not given)	01.21
Erie Canal rate for 1880	$0 00.49

Thus it will be seen that the four leading trunk railroads running to Chicago from the Upper Mississippi Valley States maintained an average of .63 of a cent per ton per mile freight charge in excess of the average freight charge of seven other trunk railroads eastward of Chicago, where tariff rates were, as Mr. Fink has explained, constantly under the control of the potentially operative competition of the water routes of the lakes and the Erie Canal. The fact thas cited to attention is a very important one. Its existence is urged as furnishing an argument for the opening up of an extension of the water route of the lakes to the Upper Mississippi so strong that its force can neither be moderated nor escaped. Assessed upon the entire cereal products of the States from which that extra freight charge is collected, the annual aggregate would alone reach the sum of $3,482,687, if only the crop yield of the principal cereals of Iowa, Minnesota, Kansas, Nebraska, and one-half of that of Illinois and Wisconsin be taken into the account, estimating these products at 2,785,350 tons weight and the increased cost at $1.25 per ton average.

But that added freight charge, thus resulting from the absence of water-route competition from the Upper Mississippi to the lakes at Chicago, is not alone collected on the cereal products of the States enumerated. It is none the less chargeable upon

and collected on the reported cattle and hogs, the cured and barreled meats, and the dairy products and the imported articles of those several States. A just computation of those charges would give a total of annual loss to the people which would be deemed altogether fabulous and impossible by those who have not given attention to the facts actually involved.

These facts find earnest enforcement, moreover, in yet others directly illustrating the beneficent results to producers and consumers attendant upon the maintenance of water-route competition with railroads. For example, the freight charges by rail during the past season on wheat from Saint Paul to Chicago or Milwaukee were 20 cents per 100 pounds in car-load lots, or 12 cents per bushel. From Saint Paul to Davenport or Rock Island, by the Mississippi River, the charges were 3 cents to 4 cents per bushel for wheat, although lower rates were frequently accepted. From La Salle, on the Illinois River, and the northern terminus of the Illinois and Michigan Canal, as also from Henry, 30 miles south of La Salle, the charges of last season on wheat were 3 cents per bushel, including State tolls on canal. Deducting the State tolls, 1⅓ mills per 1,000 pounds per mile, and 3 cents per mile on boats, or 7 mills per bushel of wheat, the actual charge for transportation would have been 2.3 cents per bushel.

Now, estimating the cost of transportation on the proposed Hennepin Canal from at or near Rock Island to the Illinois River, at or near Hennepin, say 63 miles, at the same rate per bushel per mile charged on the 100 miles of the Illinois and Michigan Canal free of tolls, at 1½ cents per bushel of wheat, then by an all-water route from the Upper Mississippi to the Illinois River and thence to Chicago, the freight from Rock Island to Chicago would be 3.8 cents per bushel. But this estimate, it is to be noted, is based upon the present use of canal-boats of only 160 tons on the Illinois and Michigan Canal. The proposed Hennepin Canal, however, contemplates use of boats of 280 tons; and an enlargement of the Illinois and Michigan Canal to an equal accommodation of tonnage would secure a reduction in freight charges of fully 25 per cent. on the 100 miles from La Salle to Chicago. This would lessen the charge to an extent of nine-tenths cent per bushel. The actual charge per bushel from Saint Paul to Chicago, via the Mississippi River and the Hennepin Canal, would then be as follows:

	Cents.
Saint Paul to western terminus of Hennepin Canal	3
Mississippi River to Chicago, via Hennepin and Illinois and Michigan Canals	2.9 or 3
Total from Saint Paul to Chicago	6

Thus there would be effected a saving of 6 cents per bushel on wheat from the Upper Mississippi River districts to Chicago, and so on the vast aggregate of that cereal now compelled to seek entrance upon the water-route of the lakes only through transportation by railroad.

Actual results are shown already, it may be further urged, as due to the direct competition of canal and railroad, in the case of Illinois and Michigan Canal and the railroads by which it is paralleled. The railroad commissioners of Illinois established the freight charge on wheat by rail last season at 11 cents per 100 pounds, or 6.6 cents per bushel, for 100 miles, the distance from La Salle to Chicago; for 130 miles, the distance from Henry, on the Illinois River, to Chicago, 12 cents per 100 pounds, or 7.2 cents per bushel; for 182 miles, the distance from Rock Island to Chicago, 13.4 cents per 100 pounds, or 8.2 cents per bushel. It has been freely stated and generally believed that the railroads have regarded these rates of the commissioners as too low. Yet wheat was last season taken from Henry and from Peoria, each on the Illinois River, for 3 cents per bushel by rail while the schedule rates were 7.2 cents per bushel. Thus were the rates of the railroad compelled to fall to a point of equality with those of the canal; while on lines not so placed in competition with that water-route the rates from shipping stations of equal distance from Chicago with those of Peoria, Henry, and La Salle were required to pay the full schedule rate as established by the commissioners.

These illustrations give emphasis to, but do not at all exhaust, the facts which are relied uopn to support to the utmost this the third reason thus urged by which the desire for the construction of the Hennepin Canal is enforced.

4. The vast volume attained by the annual cereal product of the States directly tributary to the Upper Mississippi presents yet additional support to the plea for an all-water transportation route to the East. The annual report of the Chicago Board of Trade for 1882 estimates the crop yield thus:

	Illinois.	Iowa.	Kansas.	Nebraska.	Minnesota.	Wisconsin.
	Bushels.	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*	*Bushels.*
Wheat	52, 302, 900	25, 487, 200	33, 248, 000	14, 947, 200	37, 030, 500	20, 145, 400
Corn	187, 336, 900	178, 487, 600	150, 452, 600	82, 478, 200	21, 127, 600	30, 201, 600
Oats	18, 696, 000	99, 141, 000	29, 700, 000	44, 555, 700	9, 417, 650	12, 780, 800
Total	258, 335, 800	303, 115, 800	213, 400, 600	141, 981, 100	67, 575, 750	63, 127, 800

Thus is presented a grand total of 1,047,536,850 bushels as the product of three cereals only, in a single year, from six States, constituting only a part of the widely extended area certain to be affected and benefited by an extension to the Upper Mississippi of the water-route system of transportation reaching westward from New York, but now having its westward terminus at Chicago. But consideration of these facts would be seriously incomplete were it not made to include the fact that, vast as are the aggregates of productions in the States named for the year 1882, they are certain to be yet largely increased year by year. Comparative statistics are almost startling in that regard; thus, as a single illustration where many might be given, the wheat product of Iowa from 1849 to 1860, as shown by carefully compiled statistics, aggregated 50,000,000; from 1850 to 1860, 195,000,000; from 1870 to 1881, 375,000,000 bushels. Of corn the yield was from 1849 to 1860, 250,000,000; from 1860 to 1870, 550,000,000; and from 1870 to 1881, 1,800,000,000 bushels. Estimating the wheat at 85 cents per bushel and the corn at 35 cents, a curious statistician has recently shown (see Clinton, Iowa, Agriculturist, February 2, 1883) that the total value of these two crops in Iowa, excluding those of 1882, would equal $1,177,000,000, or more than the highest estimate of the value of all the gold product of California from its discovery on June 19, 1848, to June 30, 1881.

In this connection, too, may be cited the fact, that while the total wheat crop of the United States increased from 181,199,000 bushels in 1867 to 498,549,000 bushels in 1881, the larger part of that increase was signalized in the States of the Upper Mississippi Valley.

This astonishing development in the great growth of a single cereal, however, does but faintly indicate the wondrously rapid advance of these States in relation to other productions; for corn, cattle, hogs, butter, cheese, fruits, &c., are, it is notorious, largely enlisting effort for their increase on the part of the farmers of the Northwest, and that with great success.

5. The fact that the producers of the Northwest do and must increasingly look to the exportation of their cereals, provisions, dairy products, and cattle, as offering the surest market and the largest profit, has also great weight in the argument urged in behalf of the Hennepin Canal. Those European markets are no longer left to supply by American producers. These are invited, but only in competition with those of other countries. The freight rates to be paid in transporting products from the Upper Mississippi to Liverpool often alone determine the possibility or impossibility of profitable exportation. On this point the evidence taken in New York by a committee of the State senate appointed to investigate the facts as to the relative advantage to commerce of the Erie Canal was conclusive. That committee, which had its sessions in September, 1881, recorded the testimony of prominent members of the New York Produce Exchange, which asserted that it frequently happened that the difference of 1 cent per bushel in the price of wheat in New York City determined the ability or inability of the commission men and dealers to make shipments to European markets. One shipper placed that controlling difference as low as one-fourth of a cent per bushel. It was also the concurrent statement of several of the gentlemen testifying that advance in freight rates frequently estopped grain exportations, while freight reductions stimulated such movements of cereals, and gave legitimate impetus to the grain markets of the entire country (see printed report of New York senate committee on Erie Canal, submitted to general assembly of 1882).

So manifestly correct are these several testimonies that they were even anticipated by Mr. Joseph Nimmo, jr., of the Bureau of Statistics, when he said in his report on commerce of the United States for 1880 (page 154):

"The price of all commodities of low value in proportion to weight is in every market greatly affected by the cost of transportation.

"Especially is this the case in regard to the surplus agricultural products of the Western and Northwestern States. The low rates which prevail for transportation upon the Northern water lines, therefore, exercises an important regulating influence over the price of all the products of the West, not only in the markets of the Atlantic seaboard States, but also in foreign countries; it is due chiefly to this fact during the last ten years that the value of domestic exports from the United States has greatly increased, and that since the year ended June 30, 1875, the value of exports from the United States has largely exceeded the value of imports to the United States."

Testimony and statement in this direction could here be indefinitely cited in addition, from official and unofficial authorities, did the limits assigned to this paper permit. It must suffice, however, to suggest thus the mere outlines of fact and argument co-operating in urgent appeal for the construction of a canal the needs for which are really national, and the directly beneficent influence of which, were it completed and in operation, would be realized from the Missouri to the Hudson.

6. Scarcely less important to the Upper Mississippi Valley region than the export of its products, rendered possible and profitable only when cheap transportation is secured, is the ready and inexpensive delivery of its imports. The aggregate of these increases year by year, while it has already reached proportions and value which are

literally immense. Thus, not only are vast totals of anthracite coal and crude and manufactured iron from Pennsylvania, pottery from New Jersey and Ohio, hard woods from Indiana, and stone and bituminous coal from Eastern Illinois shipped in large quantities to the Upper Mississippi Valley States, but the cotton goods of Massachusetts, the woolens of Rhode Island, the machinery of Connecticut, the agricultural implements of New York, all constituting heavy bulk freights, are constantly adding to the number of their consumers in the wide area of territory to be more immediately benefited by the construction of the Hennepin Canal.

A single locality may here be specifically mentioned as furnishing significant illustration of the general fact thus urged to attention. The tri-cities of Moline, Davenport, and Rock Island (to name each in order of its manufacturing importance) have had their respective business interests carefully revised, in statistical form, at the close of each year, for the columns of the Davenport Gazette. The last of these reports, that of January 1, 1883, for the year 1882, presents some noteworthy figures: A single plow manufactory establisment at Moline (Deere & Co.) consumed in 1882 1,110 tons of steel, 3,000 tons of wrought iron, 900 tons of pig-iron, 300 tons of malleable iron, 2,000,000 feet of oak and ash lumber, 400 tons of grindstone, 30 tons of emery, and 250 barrels of oil and varnish, employing weekly 700 men. Another establishment (the Moline Company's plow works) used only a less aggregate of similar material, the value of the product of these two establishments footing up to $2,500,000 for the year. The Moline Wagon Company manufactured goods to the value of $625,000, the Deere Planter Company to the value of $600,000, the two malleable iron companies to the value of $280,000, the machine, engine, and boiler shops to the value of $480,000, the paper-mills to the value of $150,000, the pump factory to the value of $125,000, while the saw-mills and other establishments, aggregated a yield of products exceeding in value a million dollars more. In Davenport the enumerated manufactures of the year—agricultural implements, lumber, flour, oatmeal, glucose, carriages, woolen goods, cigars, clothing, &c.—aggregated a value of $5,864,876, and the value by jobbing houses, the sum of $8,046,730; the shipments of local freight by three railroads, 17,536 car-loads, and the receipts, 16,653 car-loads. In Rock Island the plow works manufactured goods in excess of a million dollars in value; the glass works to the value of $200,000, stove works to the value of $100,000, the saw-mills, 80,031,866 feet of lumber only, and 18,328,750 shingles, 16,653,000 lath, and 198,650 pickets. If to this partial exhibit of the manufacturing interest of Rock Island City were added those of the United States arsenal on Rock Island, the aggregate of railroad shipments would be 17,982 car-loads shipped, and 18,258 forwarded by four roads, including the receipts and exports of coal, largely mined from the extensive coal fields lying within an area of 15 miles east and northeast of Rock Island.

It is important to note in this connection that even the wholesale dry-goods houses of such Upper Mississippi cities as Keokuk and Dubuque also, as indeed those of the entire region west of Chicago, are accustomed to direct that shipments to them of baled goods, sheetings, muslins, calicoes, &c., of which they purchase largely in early summer, shall be sent to Chicago from New York wholly by water-route transportation. It is the constant experience of these business men that their freight charges from Chicago west to their respective cities equal from one-half to two-thirds of the entirety of such charges from New York to Chicago. Indeed, it is in proof that for distances of only 200 miles from Chicago and less, the freight charges have in many instances exceeded those made from New York to Chicago. As a result, it can be conclusively established that the extension to the Upper Mississippi of the water-route transportation enjoyed from New York to Chicago would considerably enhance the legitimate profits of all dealers in staple manufactured goods, while largely reducing the cost of these to consumers.

In illustration of the undeniable fact thus cited to attention it may be stated that anthracite coal transported from Lackawanna mines in Pennsylvania to Chicago at a net freight charge of $1.40 per ton has continuously cost $2 per ton additional as its freight charge to the Upper Mississippi River from Chicago. When it is remembered that the use of this Pennsylvania coal throughout the entire Northwest, even to Denver, Colo., is constantly increasing year by year, it will be seen that the certain reduction of freight charges from Chicago to Upper Mississippi, to the extent of at least $1 per ton, to follow the construction of the Hennepin Canal, would constitute a great boon to hundreds of distant communities and to many thousands of people scattered over a widely extended area of country. Similarly, also, a large aggregate of Northwestern citizenship would be greatly benefited by the reduction in the cost of bituminous coal taken from the Illinois River coal fields, sure to result, in all the Upper Mississippi River cities and towns, and the communities having ready communication therewith, from the transfer of loaded coal barges from the former river to the latter river by way of the proposed canal. Such barges could readily be towed from the western outlet of that canal direct to Saint Paul and Mineapolis, so as to place the Illinois River coal in those cities at a cost of at least $1 a ton less than that now paid therein. Such is the demonstrable fact of unquestionable computation of all expenses o be incurred in such a transfer of coal products from the miners to the consumers.

7. It is essential to a correct understanding of the demand for the construction of the proposed canal that the fact be fully comprehended that Chicago is the natural, and the inevitable center of the commerce of the entire Northwest. In that city is found not only the best market for all the products of the Upper Mississippi Valley region, but the market for such products. There is really purchased, as the reports of Mr. Charles Randolph, secretary of the Chicago Board of Trade, conclusively show, eight-tenths of all the grain and provisions moved eastward for export to Europe.

To reach that central market readily, directly, and cheaply, is, therefore, a prime concern of the producing classes of the Upper Mississippi Valley.

8. During the past few years there has resulted a radical change in the methods of transporting cereals. Grain is no longer sacked for shipment. Instead it is carried in bulk from the various points in Minnesota, Wisconsin, and Iowa, on the Upper Mississippi; the grain is loaded in barges in bulk, and is then floated down to railroad elevators at such other points as La Crosse, Dunleith, and Savannah, there to be transferred to railroad cars and carried to Chicago, or moved farther down the river to Saint Louis, there to be transferred to larger barges, and in these carried to New Orleans. In the instance of one contract executed in the summer of 1881, a large quantity of wheat was thus taken from Saint Paul to New Orleans without breakage of cargoes, but such a transit can be made only during seasons of high water on the Upper Mississippi, since the grain barges used on the river below Saint Louis draw 6 to 7 feet water, while the depth of the Upper Mississippi channel admits passage of barges drawing 4 feet only, in ordinary stages of navigation. Therefore, during by far the greater part of each season it is impracticable to carry grain in barges from Upper Mississippi River points to New Orleans without breaking bulk; just as it is impracticable to carry such cargoes to Chicago without similar breakage of bulk. What is needed, then, is that grain-laden barges shall be enabled to float from any Mississippi River point direct to Chicago, just as originally placed in cargo. This is what the canal under consideration will permit and render certain, reliable, and inexpensive. Such barges loaded with grain in bulk will, after reaching Chicago by way of the Mississippi River, the Hennepin Canal, the Illinois River, and Michigan Canal, return to their starting points bearing cargoes of iron, coal, machinery, agricultural implements, heavy case goods, crockery crates, &c., leaving freight charges largely less than can possibly be obtained where railroads are alone the transportation agents.

9. It is not pretended by any intelligent advocate of the proposed canal that it will or can compete with railroads in the transportation of light freights or perishable goods. It is not, therefore, "opposition to railroads" which inspires the movement for the canal which has during the past few years increasingly enlisted the sympathy and support of the people of Illinois, Iowa, Minnesota, and Wisconsin with more or less earnestness. On the contrary, there are not wanting very sagacious friends of existing railroads, and zealous advocates of the projection and completion of still other and new railroads, who are clear in the conviction that the extension to the Upper Mississippi of the water-route transportation system of the Erie Canal and the lakes will so greatly enhance the prosperity of the Northwest, will so develop the country immediately tributary to such extended water route, and will so increase the lighter freight traffic and passenger travel of the railroads occupying territory contiguous to the route of the canal under consideration, that the railroad interests will be really benefited by the construction of the canal rather than otherwise. In support of this view it is insisted that the actual saving in annual freight charges on cereals, provisions, and other heavy products, together with similar savings quite as certain to result on the cost of transportation on bulky and weighty commodities to be purchased by the people raising such products, will so greatly increase their ability to expend money in other directions that the receipts of the railroads will find increase rather than reduction as a result of the water-route extension under consideration. The aggregate of such savings annually would unquestionably be very large. The amount can only be approximately estimated. A moderate competition on the actual shipment of the grain alone raised in the States of Iowa, Kansas, Nebraska, Minnesota, the western half of Missouri, and the western half of Wisconsin must place that annual saving to the producer in the matter of freight charges solely, at much more than $3,000,000. Such an estimate will be much below the actual sum total rather than at all in excess thereof. If, then, to that sum is added a just estimate of the saving certain to result on the freight charges on commodities imported into the States named, which freights are relatively much higher on such importations than on the cereal exports, it will be seen, it is insisted, that the saving to the people of the Upper Mississippi River States to be effected as a result of the building and operation of the Hennepin Canal cannot be less annually than $5,000,000. These are the additions to the wealth of the people in which the railroads used by the people benefited would so certainly share.

10. So rapidly are increasing the yearly products of the Northwest that, as is well known to shippers and business men generally, it has already become a serious ques-

tion, during the periods in which grain and stock are being pressed forward to a market, whether the limits of capacity in railroad freight transportation have not been nearly reached. Were it necessary so to do, a series of statistical facts could here be given, as quoted from official sources, showing a constant increase of productions in the Northwest which is really marvelous and which unmistakably indicates the necessity, no less than the wisdom, of more generous efforts to extend and increase the facilities afforded for the transportation of those products to the chief market they so inevitably and pressingly seek—the markets of Chicago and the Eastern Atlantic ports.

11. A single point only remains to be noticed. This is that the railroads cannot possibly carry bulky and heavy freights as cheaply as these can be transported on canal, river, and lake. This is as true as to the railroads which have been made the recipients of generous aid from the General Government, through grants of public lands, which in themselves would to-day constitute a princely domain, as it is of roads built wholly through the investment of private and corporate moneys. This is shown in the fact that while the freight charges on the Erie Canal were successively reduced from .872 per ton per mile in 1868 to .49 cents per ton per mile in 1880, as already shown herein (including tolls to the State), the land-grant roads of the Northwest maintain their routes at an excess of 1.20 cents per ton per mile. Later reports of these roads than those hereinafter cited show only slight reduction, and so furnish even additional proof of this. For instance, for 1882 the average freight charge of the Illinois Central was 1.41 cents per ton per mile; that of the Chicago and Alton, 1.031 cents; that of the Chicago, Burlington and Quincy, 1.19 cents; the Chicago and Rock Island and Pacific, 1.22 cents; the Chicago and Northwestern, 1.465 cents; and the Chicago, Milwaukee and Saint Paul, 1.77 cents per ton per mile. This last consideration gives emphasis to the argument, it is urged, which presses upon the General Government the duty of securing to the people that cheap transportation, which is possible only in the use of the natural water-ways of the country and of such connections of these with one another as can be readily made, at a relatively small expense, and which will, when made, open up to wide areas of territory established water-routes to which they are now practically denied access.

These are some of the considerations which are pressed in support of the request for the construction of the proposed Hennepin Canal. It is urged with much earnestness, by citizens of careful thought and extended business observation and experience, that these and other considerations not herein enumerated justly entitle the canal in question to approval and support as a national enterprise of great merit and increasing importance.

AN ACT ceding the Illinois and Michigan Canal to the United States.

SECTION 1. *Be it enacted by the people of the State of Illinois represented in the general assembly*, That the Illinois and Michigan Canal, its right of way, and all its appurtenances, and all right, title, and interest which the State may now have in any real estate ceded to the State by the United States for canal purposes, be, and are hereby, ceded to the United States for the purpose of making and maintaining an enlarged canal and water-way from Lake Michigan to the Illinois and Mississippi rivers; and this cession is made upon the condition that the United States shall, within five years from the time this act takes effect, accept this grant, and thereafter maintain the said canal and water-way for the purpose aforesaid. In case the United States shall accept this grant, it is upon the express condition that the canal shall be enlarged in such manner as Congress may determine, and be maintained as a national water-way for commercial purposes, to be used by all persons, without discrimination, under such rules and regulations as Congress may prescribe; and the real estate aforesaid, hereby conveyed to the United States, shall be used, and the avails thereof applied, to carry out the object of this grant, and for no other purpose, in such manner as Congress may determine.

SEC. 2. The general assembly shall have power to withdraw and revoke this proposed grant at any time previous to its acceptance by Congress, but when the United States, by act of Congress, shall accept the grant and conditions provided for by section one of this act, the governor shall immediately thereafter execute and deliver in the name of the State of Illinois, to the United States, a deed of cession in accordance with the provisions of this act, and shall then and there, or as soon as practicable, surrender all property mentioned in this act to be granted to the proper authorities of the United States; and until the delivery of such deed, and acceptance of the same (together with the property conveyed) by the United States, the authority and duty of the State of Illinois to operate said canal, and control its property and appurtenances, shall in no respect be impaired.

SEC. 3. This act shall not take effect until it shall first have been submitted to a vote of the people of the State of Illinois at the general election to be held on Tuesday, the fifth day of November, A. D. 1882, and have been approved by a majority of all the votes polled at such election. At the said election the ballots, in so far as they relate to this act, shall be in the following form: "For the act ceding the Illinois and

Michigan Canal to the United States"; and when so voted it shall count in favor of this act, but if canceled with ink or pencil, it shall be counted against this act. The returns of the whole vote cast at said election, and of the votes for the adoption or rejection of this act, shall be made and canvassed by the same officers and in the same manner as are the returns of the votes for senators and representatives of the State of Illinois; and if it shall appear that a majority of the votes polled are "for the act ceding the Illinois and Michigan Canal to the United States," the governor shall make proclamation thereof, and this act shall take effect from and after the date of such proclamation; but if a majority of the votes cast are "against the act ceding the Illinois and Michigan Canal to the United States," then this act shall be null and void.

Approved April 28, 1882.

ESTIMATES.

UNITED STATES ENGINEER OFFICE,
Chicago, Ill., February 23, 1883.

GENERAL: I have the honor to transmit herewith, in advance of the report, the estimates for the construction and maintenance of the Hennepin Canal, and the enlargement of the Illinois and Michigan Canal, as provided for in the act of Congress passed August 2, last.

Three lines for the canal, from Hennepin to the Mississippi, with a feeder from Rock River, at Dixon, were surveyed, and are designated below as the routes to Marais d'Osier, Watertown, and Rock Island.

It is proposed to make the canal and feeder 80 feet wide on the water-line and 7 feet deep, with locks 170 feet long and 30 feet wide. The same dimensions are taken for the Illinois and Michigan Canal.

MARAIS D'OSIER ROUTE.

Length, 64 miles.
Number of locks, 31.

Estimated cost of construction of canal and feeder, including right of way	$5,811,367 50
Estimated cost of maintenance and ordinary repairs, annually	88,600 00
Dredges	36,000 00

WATERTOWN ROUTE.

Length, 65 miles.
Number of locks, 32.

Estimated cost of construction of canal and feeder, including right of way	$7,207,646 88
Estimated cost of maintenance and ordinary repairs, annually	91,245 00
Dredges	36,000 00

ROCK ISLAND ROUTE.

Length, 75 miles,
Number of locks, 35.

Estimated cost of construction of canal and feeder, including right of way	$6,672,890 67
Estimated cost of maintenance and ordinary repairs, annually	94,820 00
Dredges	36,000 00
The length of the feeder from Rock River at Dixon is 37 miles, and its estimated cost included in the above is	1,664,117 52

ENLARGEMENT OF THE ILLINOIS AND MICHIGAN CANAL.

Length, 96 miles.
Number of locks, 16.

Estimated cost of construction	$2,298,919 15
Estimated cost of maintenance and ordinary repairs, annually	50,000 00

It is impossible to estimate for extraordinary repairs, renewals, &c.; these will have to be provided for, from time to time, by the necessary appropriations for that purpose.

There are transmitted herewith sheets giving in detail the estimated cost of the different lines and the feeder. In explanation thereof, it will be noted that the Marais d'Osier line leaves the Watertown route at the twenty-fifth mile, and the Rock Island line leaves it at the fifty-seventh.

Very respectfully, your obedient servant,

W. H. H. BENYAURD,
Major of Engineers.

Brig. Gen. H. G. WRIGHT,
Chief of Engineers, U. S. A.

Estimate for the cost of construction of the Hennepin Canal.

MAIN LINE VIA THE MARAIS D'OSIER.

Miles from Illinois River.	Earthwork.			Lift-locks.			Cost of culverts.	Cost of weirs.	Bridges.		Cost of aqueducts.	Cost of concrete lining, at $6 per cubic yard.	Cost of right of way, and special damages.	Cost of fencing, at $1 per rod.	Special work.		Amounts.
	Cubic yards.	Price per yard.	Cost.	No. of lock.	Lift.	Cost.			Highway, cost.	Railroad, cost.					Kind.	Cost.	
					Feet.												
1	158,858.1	$0 15	$23,828 70	.....	.....	.....	.....	.....	.....	.....	.....	.....	$440 00	$640 00	Basin Illinois River.	$9,881 40	$34,790 10
2	89,183.7	20	17,836 75	1	*9	$86,955 50	$5,084 60	$1,714 65	$1,200 00	$4,258 70	.....	.....	660 00	640 00	.....	.....	118,350 20
				2													
				3	9	43,477 75	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43,477 75
3	63,527.1	20	12,705 40	.....	.....	.....	4,084 05	.....	.....	7,720 84	.....	$11,088 00	2,660 00	480 00	Retaining wall.	2,199 95	40,938 24
															Riprap	2,930 00	2,930 00
4	105,728.1	20	21,145 60	4	8	42,727 75	2,958 05	1,714 65	.....	.....	$57,097 09	11,088 00	880 00	320 00	....do	1,172 00	139,103 14
5	65,997.8	20	13,199 55	5	9	43,477 75	.....	.....	4,325 00	.....	.....	.....	1,100 00	320 00	.....	.....	62,422 30
6	83,457.2	20	16,691 45	6	8	42,727 75	3,182 80	.....	.....	.....	.....	11,088 00	880 00	320 00	.....	.....	74,890 00
7	90,451.7	20	18,090 35	7	9	43,477 75	1,268 25	1,754 65	4,325 00	.....	67,978 00	.....	990 00	320 00	Riprap	1,172 00	139,376 00
8	66,182.8	20	13,236 55	.....	.....	.....	2,329 30	.....	8,345 00	.....	.....	11,088 00	880 00	320 00	....do	2,930 00	30,128 85
9	59,942.4	20	11,988 50	8	9	88,058 00	8,007 26	1,714 65	.....	.....	.....	22,176 00	1,660 00	640 00	....do	8,790 00	143,124 41
				9	10												
10	48,361.0	20	9,672 20	.....	.....	.....	3,483 85	.....	.....	.....	.....	.....	3,320 00	640 00	Excavation for race.	422 25	17,538 30
11	77,650.3	20	15,530 05	10	9	43,477 75	6,061 95	.....	1,837 50	.....	.....	11,088 00	2,880 00	640 00	Riprap	5,860 00	87,375 25
12	82,390.3	20	16,478 05	11	9	88,058 00	.....	1,754 65	1,719 50	.....	67,978 00	11,088 00	1,880 00	320 00	....do	2,930 00	192,206 20
				12	10												
13	104,053.1	20	20,810 60	13	8	86,205 20	9,242 01	1,714 65	5,953 00	.....	.....	.....	3,880 00	640 00	....do	2,930 00	131,375 76
				14	9												
14	83,965.8	20	16,793 15	15	*10	89,160 50	7,540 00	.....	.....	.....	.....	.....	2,280 00	640 00	....do	2,930 00	119,943 66
				16													
15	229,610.2	20	45,922 05	17	10	44,580 25	1,717 50	.....	.....	.....	.....	.....	3,320 00	640 00	do	2,930 00	99,109 80
16	164,470.4	20	32,894 10	18	9	85,990 50	17,276 50	1,754 65	11,580 00	.....	106,158 30	.....	5,320 00	320 00	.....	.....	261,294 05
				19	7												
17	92,751.0	20	18,550 20	20	7	85,990 50	4,029 00	4,286 85	.....	.....	.....	.....	3,320 00	640 00	Arch under C. B. and Q.	16,053 53	132,870 08
				21	9												
															Riprap	1,172 00	1,172 00
18	89,157.0	20	17,831 40	22	9	43,477 75	4,863 10	857 32	4,108 50	.....	.....	.....	4,060 00	640 00	.....	.....	75,838 07
19	84,179.0	20	16,835 80	23	9	43,477 75	8,092 60	4,327 00	9,394 50	.....	.....	.....	3,540 00	640 00	.....	.....	86,307 65
20	125,804.0	20	25,160 80	.....	.....	.....	.....	1,285 98	.....	.....	.....	.....	660 00	640 00	.....	.....	27,746 78
21	93,704.0	15	14,055 60	.....	.....	.....	.....	3,429 30	.....	.....	.....	.....	220 00	640 00	.....	.....	18,344 90

22	131,034.0	15	19,655 10	.....	.....	.....	.....	.....	4,047 25	.....	.....	.....	2,200 00	640 00	.....	.....	.....	26,542 35
23	63,960.0	15	9,594 00	.....	.....	.....	.....	.....	4,325 00	.....	.....	.....	1,660 00	640 00	.....	.....	.....	16,219 00
24	140,420.0	15	21,063 00	.....	.....	.....	5,979 20	.....	.....	.....	.....	11,088 00	1,040 00	640 00	.....	.....	.....	39,810 20
25	103,661.0	20	20,732 20	.....	.....	.....	11,999 70	4,327 00	4,200 00	.....	.....	11,088 00	3,760 00	640 00	.....	.....	.....	56,746 90
26	61,506.0	20	12,301 20	24	7	42,727 75	5,063 95	.....	5,615 00	.....	.....	.....	1,840 00	640 00	.....	.....	.....	68,187 90
27	61,741.0	20	12,348 10	25	6	42,350 25	1,659 95	1,714 65	.....	.....	.....	.....	3,320 00	640 00	.....	.....	.....	62,033 05
28	65,630.0	20	13,126 00	.....	.....	.....	2,585 65	.....	3,650 00	.....	.....	.....	4,320 00	640 00	.....	.....	.....	24,321 05
29	73,046.0	20	14,609 20	.....	.....	.....	3,997 75	.....	.....	.....	.....	.....	3,320 00	640 00	.....	.....	.....	22,566 95
30	61,954.0	20	12,390 80	.....	.....	.....	6,255 95	.....	.....	.....	.....	.....	3,320 00	640 00	.....	.....	.....	22,606 75
31	133,866.0	20	16,761 20	26	8	32,727 75	.....	1,714 65	3,650 00	.....	.....	22,176 00	2,880 00	640 00	.....	.....	.....	100,549 60
32	72,307.0	15	10,859 55	27	7	42,727 75	3,028 80	.....	1,668 00	.....	.....	.....	440 00	640 00	.....	.....	.....	59,364 10
33	66,606.0	15	9,990 90	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....	.....	10,850 90
34	69,218.0	15	10,382 70	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....	.....	11,242 70
35	56,416.0	15	8,462 40	.....	.....	.....	.....	.....	.....	.....	.....	.....	940 00	640 00	.....	.....	.....	10,042 40
36	42,511.0	15	7,376 65	.....	.....	.....	.....	51,532 00	.....	.....	92,001 42	.....	1,160 00	640 00	.....	.....	.....	152,710 70
37	47,358.0	20	9,471 60	.....	.....	.....	3,188 95	.....	4,200 00	.....	.....	.....	1,660 00	640 00	.....	.....	.....	19,100 55
38	71,083.0	20	14,216 00	.....	.....	.....	4,014 45	.....	4,108 50	.....	.....	.....	4,660 00	640 00	.....	.....	.....	27,638 95
39	139,076.0	20	27,815 20	.....	.....	.....	2,072 50	.....	3,650 00	.....	.....	.....	3,320 00	640 00	.....	.....	.....	37,497 70
40	136,596.0	20	27,319 20	.....	.....	.....	.....	.....	3,650 00	.....	.....	.....	2,320 00	640 00	.....	.....	.....	33,929 20
41	64,735.0	20	12,947 00	.....	.....	.....	17,887 40	.....	.....	.....	.....	.....	220 00	640 00	.....	.....	.....	31,694 40
42	71,465.0	20	14,293 00	.....	.....	.....	.....	.....	4,200 00	.....	.....	.....	2,320 00	640 00	.....	.....	.....	21,453 00
43	110,963.0	20	22,192 60	.....	.....	.....	1,834 25	.....	3,650 00	.....	.....	.....	2,320 00	640 00	.....	.....	.....	30,636 85
44	71,146.0	20	14,229 20	.....	.....	.....	.....	.....	4,169 50	.....	.....	.....	660 00	640 00	.....	.....	.....	19,698 70
45	62,546.0	20	12,509 20	.....	.....	.....	6,575 60	.....	4,139 00	.....	.....	.....	2,880 00	640 00	.....	.....	.....	26,743 80
46	67,122.0	20	13,424 40	.....	.....	.....	3,287 80	.....	.....	.....	.....	.....	1,880 00	640 00	.....	.....	.....	19,232 20
47	52,160.0	20	10,432 00	.....	.....	.....	.....	.....	8,460 50	.....	.....	.....	1,100 00	640 00	.....	.....	.....	20,632 50
48	57,022.0	20	11,404 40	28	10	44,580 25	3,287 80	1,754 65	4,230 50	.....	.....	.....	2,880 00	640 00	.....	.....	.....	68,777 60
49	103,830.0	15	15,574 50	{129 * 130 *	}	91,460 50	3,287 80	2,612 20	4,138 75	.....	.....	.....	2,320 00	640 00	.....	.....	.....	120,033 75
50	7,500.0	15	1,125 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,000 00	.....	Dam Rock R..	84,500 00		94,625 00
51	6,653.0	15	997 95	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000 00	320 00	.....	.....		16,317 95
52	68,421.0	15	10,263 15	.....	.....	.....	.....	.....	2,227 50	7,040 00	.....	.....	440 00	640 00	Guard lock ...	32,045 79		52,656 44
53	53,642.0	15	8,046 30	.....	.....	.....	8,943 70	.....	.....	.....	.....	.....	660 00	640 00	.....	.....		18,290 00
54	72,029.0	15	10,804 35	.....	.....	.....	.....	.....	4,108 25	.....	.....	.....	880 00	640 00	.....	.....		16,432 60
55	69,364.0	15	10,404 60	.....	.....	.....	.....	.....	.....	.....	.....	.....	660 00	640 00	.....	.....		11,704 60
56	56,678.0	15	8,501 70	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....		9,361 70
57	54,087.0	15	8,113 05	.....	.....	.....	.....	.....	4,200 00	.....	.....	.....	440 00	640 00	.....	.....		13,393 05
58	106,569.0	15	15,985 35	31	16	85,455 50	.....	.....	.....	.....	.....	.....	660 00	640 00	.....	.....		102,740 85
59	200,319.0	15	30,047 85	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....		30,907 85
60	180,615.0	15	27,092 25	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....		27,952 25
61	159,947.9	15	23,992 05	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....		24,852 05
62	118,461.0	15	17,769 15	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....		18,629 15
63	109,393.0	15	16,408 95	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....		17,268 95
64	136,792.0	15	20,518 80	.....	.....	.....	.....	.....	11,442 00	16,923 00	.....	.....	440 00	640 00	Basin, Miss.R.	14,633 80		64,577 60
			1,024,808 75	.....	.....	1,393,350 50	184,262 03	89,964 15	150,497 75	35,942 54	391,212 81	133,056 00	134,050 00	37,600 00	.....	195,482 72		3,770,227 25
Ten (10) per cent. for contingencies, &c.																		377,022 73
Total																		4,147,249 98

* Each.

† 10½ each.

Estimate for the cost of construction of the Hennepin Canal—Continued.

MAIN LINE TO WATERTOWN.

Miles from Illinois River.	Earthwork.			Lift-locks.			Cost of culverts.	Cost of weirs.	Bridges.		Cost of aqueducts.	Cost of concrete lining, at $6 per cubic yard.	Cost of right of way, and special damages.	Cost of fencing, at $1 per rod.	Special work.		Amounts.
	Cubic yards.	Price per yard.	Cost.	No. of locks.	Lift.	Cost.			Highway, cost.	Railroad, cost.					Kind.	Cost.	
					Ft.												
25	.....	.....	$470,301 15	....	....	$1,001,320 75	$107,289 73	$30,636 00	$65,360 25	$11,979 54	$299,211 39	$110,880 00	$54,090 00	$13,600	.....	$64,303 13	$2,228,971 94
26	66,248.0	$0 20	13,249 60	24	10	44,580 25	13,415 55	.....	5,700 00	.....	.....	.....	880 00	640	.....	.....	78,465 40
27	73,356.0	20	14,671 20	...	....	.....	8,943 70	.....	.....	.....	.....	.....	1,660 00	640	.....	.....	25,914 90
28	73,219.0	20	14,643 80	....	....	.....	.....	.....	4,200 00	.....	.....	.....	2,320 00	640	.....	.....	21,803 80
29	66,409.0	20	13,281 80	25	10	44,580 25	.....	2,143 50	1,500 00	.....	.....	.....	880 00	640	.....	.....	63,025 55
30	51,748.0	15	7,762 20	....	....	.....	17,887 40	.....	.....	.....	.....	.....	220 00	640	.....	.....	26,509 60
31	52,928.0	15	7,939 20	....	....	.....	.....	.....	.....	.....	.....	.....	1,440 00	640	.....	.....	10,019 20
32	53,497.0	15	8,024 55	....	....	.....	4,943 30	.....	.....	.....	.....	.....	660 00	640	.....	.....	14,267 85
33	71,495.0	15	10,724 25	....	....	.....	13,415 55	.....	.....	.....	.....	.....	1,660 00	640	.....	.....	26,439 80
34	80,739.0	20	16,147 80	....	....	.....	1,655 50	.....	4,200 00	.....	.....	.....	1,880 00	640	.....	.....	24,523 30
35	83,442.0	20	16,688 40	....	....	.....	3,410 30	.....	.....	.....	.....	.....	1,880 00	640	Mud Creek overflow.	40,439 50	63,058 20
36	61,514.0	20	12,302 80	....	....	.....	3,410 30	.....	.....	.....	.....	.....	1,660 00	640	West Branch overflow.	19,004 50	37,017 60
37	93,662.0	20	18,732 40	26	9	43,477 75	3,410 30	2,143 50	5,700 00	.....	.....	44,352 00	880 00	640	.....	.....	119,335 95
38	100,718.0	20	20,143 60	....	....	.....	.....	.....	.....	.....	.....	.....	2,100 00	640	.....	.....	22,883 60
39	57,090.0	20	11,418 00	....	....	.....	.....	.....	4,200 00	.....	.....	.....	440 00	640	.....	.....	16,698 00
40	45,512.0	20	9,102 40	....	....	.....	1,655 50	.....	4,200 00	.....	.....	.....	1,160 00	640	.....	.....	16,757 90
41	55,943.0	20	11,188 60	....	....	.....	4,046 00	.....	4,200 00	.....	.....	.....	880 00	640	.....	.....	20,954 60
42	55,151.0	20	11,030 20	....	....	.....	.....	.....	.....	.....	.....	.....	1,880 00	640	.....	.....	13,550 20
43	83,625.0	20	16,725 00	....	....	.....	1,655 50	.....	8,400 00	.....	.....	.....	880 00	640	.....	.....	28,300 50
44	42,904.0	20	8,580 80	....	....	.....	.....	.....	4,200 00	.....	28,128 00	.....	2,320 00	640	.....	.....	43,868 80
45	72,944.0	20	14,588 80	....	....	.....	4,046 00	.....	4,200 00	.....	.....	.....	2,320 00	640	.....	.....	25,794 80
46	110,586.0	20	22,117 20	....	....	.....	8,671 00	.....	4,200 00	.....	.....	.....	1,880 00	640	.....	.....	37,508 20
47	91,709.0	20	18,341 80	26	8	42,727 75	5,668 40	2,143 50	4,200 00	.....	.....	.....	1,880 00	640	Riprap	1,172 00	76,773 45
48	61,862.0	20	12,372 40	....	....	.....	16,703 35	.....	4,200 00	.....	.....	.....	880 00	640	....do	2,930 00	37,725 75
49	58,363.0	20	11,672 60	....	....	.....	1,655 50	.....	4,200 00	.....	.....	.....	1,600 00	640	.....	.....	12,768 10
50	69,065.0	20	13,813 00	....	....	.....	25,626 68	.....	.....	.....	.....	.....	3,160 00	640	.....	.....	43,239 68
51	70,525.0	20	14,105 00	....	....	.....	7,323 90	.....	.....	.....	.....	11,088 00	1,880 00	640	.....	.....	35,036 90
52	100,135.0	20	20,027 00	....	....	.....	14,132 09	.....	.....	.....	.....	22,176 00	2,880 00	640	.....	.....	59,855 09
53	81,740.0	20	16,348 00	28	10	44,580 25	13,342 23	2,183 50	.....	.....	.....	11,188 00	4,820 00	640	.....	.....	93,001 98
54	110,664.0	20	22,032 80	29	11	45,682 75	10,030 31	1,714 80	1,500 00	.....	.....	44,352 00	2,100 00	640	.....	.....	128,052 66
55	57,486.0	20	11,497 20	....	....	.....	5,140 80	.....	.....	.....	.....	44,352 00	1,320 00	320	.....	.....	62,630 00
56	59,591.0	20	11,918 20	....	....	.....	7,123 90	.....	.....	.....	.....	33,264 00	880 00	320	.....	.....	53,506 10

57	73,580.0	20	14,716 00	....	....	.....	4,966 50	.....	6,000 00	15,000 00	.....	11,088 00	2,100 00	320	Rock excav..	5,867 00	54,057 50
58	186,529.0	20	37,305 80	....	....	.....	3,311 00	.....	12,700 00	.....	.....	.....	1,160 00	320	Riprap	1,172 00	49,268 80
59	403,861.0	20	80,772 20	....	....	.....	.....	.....	.....	.....	86,184 00	22,176 00	11,100 00	320	....do	1,172 00	214,424 20
60	145,355.0	20	29,071 00	....	....	.....	.....	.....	.....	12,999 00	.....	22,176 00	2,600 00	610	.....	.....	67,486 00
61	101,384.0	20	20,276 80	30	8	42,727 75	.....	1,714 80	.....	.....	323,190 00	.....	860 00	640	.....	.....	389,429 35
62	72,693.0	20	14,538 60	....	....	.....	1,655 50	.....	8,400 00	.....	.....	.....	2,920 00	610	.....	.....	28,154 10
63	111,922.0	20	22,384 40	....	....	.....	.....	.....	.....	10,833 00	.....	.....	3,320 00	640	.....	.....	37,177 40
64	84,866.0	20	16,973 20	31	10	44,580 25	.....	1,714 80	4,200 00	.....	.....	.....	3,200 00	640	.....	.....	71,308 25
65	24,191.0	20	4,838 20	32	13	81,432 48	3,485 30	1,714 80	1,500 00	7,040 00	.....	.....	370 00	182	Basin	18,775 00	.....
															Guard-gates..	4,272 77	.....
															Riprap.....	2,930 00	.....
															Rock excav..	426,666 60	553,007 15
			1,142,367 95	....	....	1,435,690 23	318,921 09	46,109 20	167,160 25	57,851 54	736,713 39	376,992 00	132,820 00	37,142	.....	588,704 50	5,039,572 15
	Add 10 per cent. for contingencies, &c																503,957 21
	Total																5,543,529 36

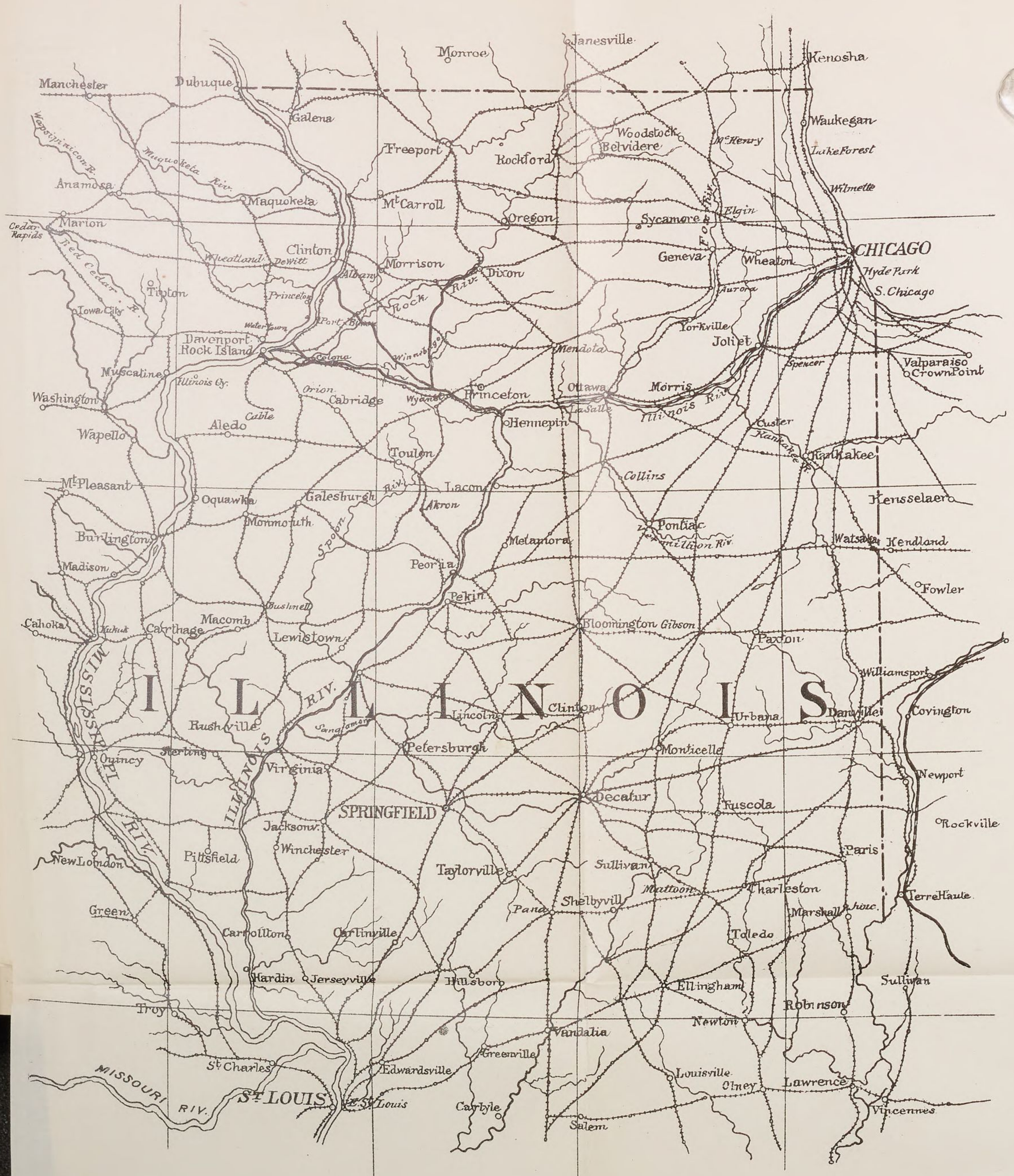
MAIN LINE TO ROCK ISLAND.

57	.....	.....	$916,207 55	....	....	$1,266,949 75	$309,569 29	100,408 80	134,360 25	$26,979 54	327,339 39	332,640 00	107,270 00	$33,120	.....	$74,272 13	$3,629,116 70
58	76,628.0	$0 20	15,325 60	30	10	44,580 25	3,311 00	1,714 65	6,000 00	.....	.....	.....	1,160 00	320	Riprap	7,172 00	73,583 50
59	34,103.0	20	6,821 60	31	6	64,580 00	1,655 50	1,714 65	.....	22,000 00	.....	.....	3,160 00	640	.....	.....	100,571 75
60	56,662.0	20	11,332 40	32	5	64,580 00	.....	.....	11,200 00	12,440 00	.....	.....	1,910 00	610	Dam, Green River.	13,000 00	115,102 40
61	5,037.0	20	1,007 40	....	....	.....	.....	.....	.....	.....	.....	.....	1,420 00	640	.....	.....	3,067 40
62	20,663.0	20	5,926 60	....	....	.....	.....	.....	.....	.....	.....	.....	6,220 00	320	.....	.....	12,466 60
63	.....	.....	.....	....	....	.....	.....	.....	.....	.....	.....	.....	6,000 00	.....	.....	.....	6,000 00
64	.....	.....	.....	....	....	.....	.....	.....	.....	.....	.....	.....	6,000 00	.....	.....	.....	6,000 00
65	.....	.....	.....	33	5	64,580 00	.....	.....	.....	.....	.....	.....	3,000 00	.....	Dam, Rock River.	65,000 00	132,580 00
68	.....	.....	.....	....	....	.....	.....	.....	18,800 00	.....	.....	.....	.....	.....	.....	.....	18,800 00
71	.....	.....	.....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Levee	5,000 00	5,000 00
72	.....	.....	.....	....	....	.....	1,655 50	.....	6,000 00	7,500 00	.....	.....	90 00	.....	Dam, Rock River.	90,000 00	.....
															Levee	3,000 00	.....
73	219,756.0	20	43,951 20	....	....	.....	3,485 30	.....	.....	.....	.....	44,352 00	2,500 00	320	Guard-lock ..	32,045 79	140,291 29
															Riprap.....	10,009 00	.....
74	106,619.0	20	21,323 80	....	....	.....	20,554 60	.....	.....	.....	.....	.....	3,700 00	640	Rock excav..	36,828 00	141,436 50
															Riprap.....	5,000 00	51,218 40
75	34,743.0	20	6,948 60	34, 35	9 each	100,000 00	.....	4,327 00	4,200 00	.....	.....	.....	1,100 00	320	....do	1,300 00	118,195 60
			1,028,844 75	....	....	1,605,270 00	340,231 19	108,165 10	180,560 25	68,919 54	327,339 39	376,992 00	143,530 00	36,960	.....	336,617 92	4,553,430 14
	Add 10 per cent. for contingencies, &c																455,343 01
	Total																5,008,773 15

Estimate for the cost of construction of the Hennepin Canal—Continued.

FEEDER BRANCH.

Miles from Dixon, Ill.	Earthwork.			Culverts.	Weirs.	Bridges.		Cost of aquoducts.	Cost of concrete lining, at $6 per cubic yard.	Cost of right of way, and special damages.	Cost of fencing, at $1 per rod.	Special work.		Amounts.
	Cubic yards.	Price per yard.	Cost.	Cost.	Cost.	Highway, cost.	Railroad, cost.					Kind.	Cost.	
1	64,323.0	$0 20	$12,864 60	$10,230 90	.....	$2,920 00	$5,800 00	.....	.....	$12,000 00	$320 00	Bulkhead	$14,242 58	.....
							10,317 00	.....	.....	.....	.....	Basin	1,258 20	.....
												Retaining wall	150,045 00	.....
												Riprap	5,860 00	$225,858 28
2	129,007.0	20	25,801 40	2,754 70	.....	5,250 00	.....	.....	.....	6,600 00	320 00	....do	11,721 00	52,447 10
3	54,236.0	20	10,847 20	8,518 38	.....	.....	.....	.....	.....	3,800 00	320 00	....do	11,721 00	35,206 58
4	82,194.0	20	16,438 80	15,093 98	.....	.....	.....	.....	.....	880 00	320 00	....do	8,791 00	41,523 78
												....do	11,721 00	.....
5	116,935.0	20	23,387 00	1,655 50	.....	.....	.....	.....	.....	4,540 00	640 00	Rock excavation	6,679 00	48,622 50
6	63,346.0	20	12,669 20	.....	.....	.....	.....	.....	.....	1,660 00	640 00	Riprap	11,721 00	26,690 20
7	84,096.0	20	16,819 20	1,655 50	.....	.....	.....	.....	.....	3,820 00	640 00	....do	3,967 00	26,841 70
8	79,594.0	20	15,918 80	3,311 00	.....	.....	.....	.....	.....	4,360 00	640 00	....do	5,860 00	30,089 80
9	69,836.0	20	13,967 20	.....	.....	.....	7,040 00	.....	.....	3,540 00	640 00	.....	.....	25,187 20
10	116,808.0	20	23,361 60	8,210 80	$4,286 00	.....	.....	.....	.....	660 00	640 00	Riprap	11,721 00	48,879 40
11	108,596.0	20	21,719 20	8,210 80	.....	4,250 00	.....	.....	$11,088 00	2,820 00	640 00	....do	5,860 00	54,588 00
12	86,313.0	20	17,262 60	13,641 20	.....	.....	7,040 00	.....	.....	3,540 00	640 00	.....	.....	42,123 80
13	107,507.0	20	21,501 40	.....	.....	.....	.....	.....	.....	3,540 00	640 00	.....	.....	25,681 40
14	137,236.0	20	27,447 20	5,509 40	.....	4,250 00	.....	.....	.....	2,100 00	640 00	.....	.....	39,946 60
15	173,015.0	20	34,603 00	.....	.....	.....	.....	.....	.....	1,660 00	640 00	.....	.....	36,903 00
16	148,199.0	20	29,639 80	.....	12,858 00	4,250 00	.....	.....	.....	1,660 00	640 00	.....	.....	49,047 80
17	117,645.0	20	23,529 00	2,754 70	.....	4,250 00	.....	.....	.....	880 00	640 00	.....	.....	32,053 70
18	79,048.0	20	15,809 60	.....	.....	4,250 00	.....	.....	.....	2,100 00	640 00	.....	.....	22,799 60
19	67,360.0	20	13,472 00	2,754 70	.....	4,250 00	.....	.....	.....	3,100 00	640 00	.....	.....	19,966 70
20	103,025.0	20	20,605 00	.....	.....	4,250 00	.....	.....	.....	2,100 00	640 00	.....	.....	27,595 00
21	105,933.0	20	21,186 60	.....	.....	4,250 00	.....	.....	.....	2,100 00	640 00	.....	.....	28,176 60
22	99,192.0	20	19,838 40	2,754 70	.....	4,250 00	.....	.....	.....	2,100 00	640 00	.....	.....	29,583 10
23	105,219.0	20	21,043 80	2,754 70	.....	4,250 00	7,040 00	.....	.....	1,100 00	640 00	.....	.....	36,828 50
24	63,847.0	20	12,769 40	.....	.....	.....	.....	.....	.....	1,660 00	640 00	.....	.....	15,069 40
25	94,256.0	20	18,851 20	.....	.....	.....	.....	.....	.....	1,660 00	640 00	.....	.....	21,151 20
26	118,314.0	20	23,662 80	2,944 00	.....	.....	.....	.....	.....	2,880 00	640 00	.....	.....	30,126 80
27	99,299.0	20	19,859 80	1,655 50	.....	4,250 00	.....	.....	.....	3,300 00	640 00	.....	.....	29,725 30
28	102,447.0	20	20,489 40	.....	.....	4,250 00	.....	.....	.....	3,820 00	640 00	.....	.....	29,199 40
29	75,801.0	20	15,160 20	1,655 50	.....	.....	.....	.....	.....	3,320 00	640 00	.....	.....	20,775 70
30	106,150.0	20	21,230 00	1,655 50	5,857 50	4,250 00	.....	$35,160 98	.....	1,820 00	640 00	.....	.....	70,613 98



Sketch of the Illinois and Michigan Canal and the proposed Hennepin Canal, showing their relations to the Illinois River, Mississippi River and Lake Michigan.

Illinois and Michigan Canal ———

Proposed Hennepin Canal ———

H Ex 79 49 2

31	77,089.0	20	15,417 80	3,311 00	.....	8,500 00	.....	.....	.....	1,820 00	640 00	.....	.....	29,688 80
32	95,118.0	20	19,023 60	3,311 00	.....	8,500 00	.....	.....	.....	2,320 00	640 00	.....	.....	33,794 00
33	216,400.0	20	43,280 00	1,655 50	3,429 30	.....	.....	.....	.....	2,320 00	640 00	.....	.....	51,324 80
34	234,995.0	20	46,999 00	.....	.....	.....	.....	.....	.....	3,320 00	640 00	.....	.....	50,959 60
35	76,425.0	20	15,285 00	.....	.....	4,250 00	.....	.....	.....	4,040 00	640 00	.....	.....	24,215 00
36	87,377.0	20	17,475 40	.....	.....	4,250 00	.....	.....	.....	2,540 00	640 00	.....	.....	24,905 40
37	84,414.0	20	16,882 80	3,311 50	5,857 50	4,250 00	.....	.....	.....	2,740 00	640 00	.....	.....	33,681 80
38	4,176.0	20	835 20	.....	.....	.....	.....	.....	.....	770 00	320 00	Guard-lock	$32,045 79	40,962 59
												Basin	6,991 60	.....
			766,954 20	109,310 46	32,288 30	88,920 00	37,237 00	35,160 98	11,088 00	109,010 00	22,720 00	.....	300,145 17	1,512,834 11
	Add 10 per cent. for contingencies, &c													151,283 41
	Total													1,664,117 52

Summary of estimated cost of enlarging the Illinois and Michigan Canal.

Items.	Amount.	Total.
Section work	$1,541,678 75	.....
Locks	448,804 75	.....
Aqueducts	39,494 00	.....
Culverts	27,600 00	.....
Waste weirs	14,349 00	.....
Steam dredge	18,000 00	.....
		$2,089,926 50
Add 10 per cent. for contingencies		208,992 65
Grand total		2,298,919 15

[Senate Ex. Doc. No. 78, Forty-ninth Congress, second session.]

Letter from the Secretary of War, transmitting a communication from Chief of Engineers, submitting a letter from Maj. W. H. H. Benyaurd, Corps of Engineers, in advance of report of survey of canal from Hennepin, on the Illinois River, to Mississippi River, at or about Rock Island, together with the estimates, &c.

FEBRUARY 28, 1883.—Referred to the Committee on Commerce and ordered to be printed.

WAR DEPARTMENT,
Washington City, February 27, 1883.

SIR: Referring to the provisions of the river and harbor act of August 2, 1882, authorizing and directing the Secretary of War to survey and locate a canal from a point on the Illinois River at or near the town of Hennepin, by the most practicable and convenient route to the Mississippi River, at or above the city of Rock Island, &c., and to report at the next session of Congress the cost of enlarging the Illinois and Michigan Canal, and the construction of the canal between Hennepin and the Mississippi River, and the right of way therefor, I have the honor to transmit herewith a communication of this date, from the Chief of Engineers, submitting a letter from Maj. W. H. H. Benyaurd, Corps of Engineers, in advance of his report of survey, together with the estimates called for.

Very respectfully, your obedient servant,

ROBERT T. LINCOLN,
Secretary of War.

The PRESIDENT *pro tempore*
Of the United States Senate.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C. February 27, 1883.

SIR: In obedience to the requirement of the river and harbor act of August 2, 1882, authorizing and directing the "Secretary of War to survey and locate a canal from a point on the Illinois River, at or near the town of Hennepin, by the most practicable and convenient route to the Mississippi River, at or above the city of Rock Island," &c., * * * and to report at the next session of Congress the cost of enlarging the Illinois and Michigan Canal, "and the construction of the canal between Hennepin and the Mississippi River, and the right of way therefor," I have the honor to submit, in advance of his report upon the survey, the inclosed letter from Maj. W. H. H. Benyaurd, Corps of Engineers, submitting the estimates called for.

Owing to the great amount of labor involved in the preparation of the report upon the three lines surveyed, it has not been possible to complete it in time for submission to Congress at its present session. It will be submitted at the earliest practicable period.

Very respectfully, your obedient servant,

H. G. WRIGHT,
Chief of Engineers,
Brig. and Bvt. Maj. Gen.

Hon. ROBERT T. LINCOLN,
Secretary of War.

UNITED STATES ENGINEER OFFICE,
Chicago, Ill., February 23, 1883.

GENERAL: I have the honor to transmit herewith, in advance of the report, the estimates for the construction and maintenance of the Hennepin Canal, and the enlargement of the Illinois and Michigan Canal, as provided for in the act of Congress passed August 2, last.

Three lines for the canal, from Hennepin to the Mississippi, with a feeder from Rock River, at Dixon, were surveyed, and are designated below as the routes to Marais d'Osier, Watertown, and Rock Island.

It is proposed to make the canal and feeder 80 feet wide on the water line and 7 feet deep, with locks 170 feet long and 30 feet wide. The same dimensions are taken for the Illinois and Michigan Canal.

MARAIS D'OSIER ROUTE.

Length, 64 miles.	
Number of locks, 31.	
Estimated cost of construction of canal and feeder, including right of way	$5,811,367 50
Estimated cost of maintenance, and ordinary repairs, annually	88,600 00
Dredges	36,000 00

WATERTOWN ROUTE.

Length, 65 miles.	
Number of locks, 32.	
Estimated cost of construction of canal and feeder, including right of way	$7,207,646 88
Estimated cost of maintenance and ordinary repairs, annually	91,245 00
Dredges	36,000 00

ROCK ISLAND ROUTE.

Length, 75 miles.	
Number of locks, 35.	
Estimated cost of construction of canal and feeder, including right of way	$6,672,890 67
Estimated cost of maintenance and ordinary repairs, annually	94,820 00
Dredges	36,000 00
The length of the feeder from Rock River at Dixon is 37 miles, and its estimated cost, included in the above, is	1,664,117 52

Enlargement of the Illinois and Michigan Canal.

Length, 96 miles.	
Number of locks, 16.	
Estimated cost of construction	$2,298,919 15
Estimated cost of maintenance and ordinary repairs, annually	50,000 00

It is impossible to estimate for extraordinary repairs, renewals, &c.; these will have to be provided for, from time to time, by the necessary appropriations for that purpose.

There are transmitted herewith sheets giving in detail the estimated cost of the different lines and the feeder. In explanation thereof, it will be noted that the Marais d'Osier line leaves the Watertown route at the twenty-fifth mile, and the Rock Island line leaves it at the fifty-seventh.

Very respectfully, your obedient servant,

W. H. H. BENYAURD,
Major of Engineers.

Brig. Gen. H. G. WRIGHT,
Chief of Engineers, U. S. A.

Estimate for the cost of construction of the Hennepin Canal.

MAIN LINE VIA THE MARAIS D'OSIER.

Miles from Illinois River.	Earthworks.			Lift-locks.			Cost of culverts.	Cost of weirs.	Bridges.		Cost of aqueducts.	Cost of concrete lining, at $6 per cubic yard.	Cost of right of way, and special damages.	Cost of fencing, at $1 per rod.	Special work.		Amounts.
	Cubic yards.	Price per yard.	Cost.	No. of lock.	Lift.	Cost.			Highway, cost.	Railroad, cost.					Kind.	Cost.	
					Feet.												
1	158,858.1	$0 15	$23,828 70										$440 00	$640 00	Basin Illinois River.	$9,881 40	$34,790 10
2	89,183.7	20	17,836 75	1	*9	$86,955 50	$5,084 60	$1,714 65	$1,200 00	$4,258 70			660 00	640 00			118,350 20
				2													
				3	9	43,477 75											43,477 75
3	63,527.1	20	12,705 40				4,084 05			7,720 84		$11,088 00	2,660 00	480 00	Retaining wall.	2,199 95	40,938 24
															Riprap	2,930 00	2,930 00
4	105,728.1	20	21,145 60	4	8	42,727 75	2,958 05	1,714 65			$57,097 00	11,088 00	880 00	320 00	....do	1,172 00	139,103 14
5	65,997.8	20	13,199 55	5	9	43,477 75			4,325 00				1,100 00	320 00			62,422 30
6	83,457.2	20	16,691 45	6	8	42,727 75	3,182 80					11,088 00	880 00	320 00			74,890 00
7	90,451.7	20	18,090 35	7	9	43,477 75	1,268 25	1,754 65	4,325 00		67,978 00		990 00	320 00	Riprap	1,172 00	139,376 00
8	66,182.8	20	13,236 55				2,329 30		8,345 00			11,088 00	880 00	320 00	....do	2,930 00	39,128 85
9	59,942.4	20	11,988 50	8	9	88,058 00	8,097 26	1,714 65				22,176 00	1,660 00	640 00	....do	8,790 00	143,124 41
				9	10												
10	48,361.0	20	9,672 20				3,483 85						3,320 00	640 00	Excavation for race.	422, 25	17,538 30
11	77,650.3	20	15,530 05	10	9	43,477 75	6,061 95		1,837 50			11,088 00	2,880 00	640 00	Riprap	5,860 00	87,375 25
12	82,390.3	20	16,478 05	11	9	88,058 00		1,714 65	1,719 50		67,978 00	11,088 00	1,880 00	320 00	....do	2,930 00	192,206 20
				12	10												
13	104,053.1	20	20,810 60	13	8	86,205 50	9,242 01	1,754 65	5,953 00				3,880 00	640 00	....do	2,930 00	131,375 76
				14	9												
14	83,965.8	20	16,793 15	15	*10	89,160 50	7,540 01						2,880 00	640 00	....do	2,930 00	119,943 66
				16													
15	229,610.2	20	45,922 05	17	10	44,580 25	1,717 50						3,320 00	640 00	....do	2,930 00	99,109 80
16	164,470.4	20	32,894 10	18	9	85,990 50	17,276 50	1,754 65	11,580 00		106,158 30		5,320 00	320 00			261,294 05
				19	7												
17	92,751.0	20	18,550 20	20	7	85,990 50	4,029 00	4,286 85					3,320 00	640 00	Arch under C. B. and O.	16,053 53	132,870 00
				21	9										Riprap	1,172 00	1,172 00
18	89,157.0	20	17,831 40	22	9	43,477 75	4,863 10	857 32	4,108 50				4,060 00	640 00			75,838 07
19	84,179.0	20	16,835 80	23	9	43,477 75	8,092 60	4,327 00	9,394 50				3,540 00	640 00			86,307 65
20	125,804.0	20	25,160 80					1,285 98					660 00	640 00			27,746 78
21	93,704,0	15	14,055 60					3,429 30					220 00	640 00			18 344 90

22	131,034.0	15	19,655 10	.....	.....	.....	.....	.....	4,047 25	.....	.....	.....	2,200 00	640 00	.....	.....	26,542 35
23	63,960.0	15	9,594 00	.....	.....	.....	.....	.....	4,325 00	.....	.....	.....	1,660 00	640 00	.....	.....	16,219 00
24	140,420.0	15	21,063 00	.....	.....	.....	5,979 20	.....	.....	.....	.....	11,088 00	1,040 00	640 00	.....	.....	39,810 20
25	103,661.0	20	20,732 20	.....	.....	.....	11,99 70	4,327 00	4,200 00	.....	.....	11,088 00	3,760 00	640 09	.....	.....	56,746 90
26	61,506.0	20	12,301 20	24	7	42,727 75	5,063 95	.....	5,615 00	.....	.....	.....	1,840 00	640 00	.....	.....	68,187 90
27	61,741.0	20	12,348 20	25	6	42,350 25	1,659 95	1,714 65	.....	.....	.....	.....	3,320 00	640 00	.....	.....	62,033 05
28	65,630.0	20	13.126 00	.....	.....	.....	2,585 65	.....	3,650 00	.....	.....	.....	4,320 00	640 00	.....	.....	24,321 05
29	73,046.0	20	14,609 20	.....	.....	.....	3,997 75	.....	.....	.....	.....	.....	3,320 00	640 00	.....	.....	22,566 95
30	61,954.0	20	12,390 80	.....	.....	.....	6,255 95	.....	.....	.....	.....	.....	3,320 00	640 00	.....	.....	22,606 75
31	133,806.0	20	26,761 20	26	8	42,727 75	.....	1,714 65	3,650 00	.....	.....	22,176 00	2,880 00	640 00	.....	.....	100,549 60
32	72,397.0	15	10,859 55	27	7	42,727 75	3,028 80	.....	1,668 00	.....	.....	.....	440 00	640 00	.....	.....	59,364 10
33	66,606.0	15	9,990 90	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....	10,850 90
34	69,218.0	15	10,382 70	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....	11,242 70
35	56,416.0	15	8,462 40	.....	.....	.....	.....	.....	.....	.....	.....	.....	940 00	640 00	.....	.....	10,042 40
36	42,511.0	15	7,376 65	.....	.....	.....	.....	51,532 00	.....	.....	92,001 42	.....	1,160 00	640 00	.....	.....	152,710 70
37	47,358.0	20	9,471 60	.....	.....	.....	3,188 95	.....	4,200 00	.....	.....	.....	1,600 00	640 00	.....	.....	19,100 55
38	71,083.0	20	14,216 00	.....	.....	.....	4,014 45	.....	4,108 50	.....	.....	.....	4,660 00	640 00	.....	.....	27,638 95
39	139,076.0	20	27,815 20	.....	.....	.....	2,072 50	.....	3,650 00	.....	.....	.....	3,320 00	640 00	.....	.....	37,497 70
40	136,596.0	20	27,319 20	.....	.....	.....	.....	.....	3,650 00	.....	.....	.....	2,320 00	640 00	.....	.....	33,929 20
41	64,735.0	20	12,947 00	.....	.....	.....	17,887 40	.....	.....	.....	.....	.....	220 00	640 00	.....	.....	31,694 40
42	71,465.0	20	14,293 00	.....	.....	.....	.....	.....	4,200 00	.....	.....	.....	2,320 00	940 00	.....	.....	21,453 00
43	110,963.0	20	22,192 60	.....	.....	.....	1,834 25	.....	3,650 00	.....	.....	.....	2,320 00	640 00	.....	.....	30,636 85
44	71,146.0	20	14,229 20	.....	.....	.....	.....	.....	4,169 50	.....	.....	.....	660 00	640 00	.....	.....	19,698 70
45	62,546.0	20	12,509 20	.....	.....	.....	6,575 60	.....	4,139 00	.....	.....	.....	2,880 00	640 00	.....	.....	26,743 80
46	67,122.0	20	13,424 40	.....	.....	.....	3,287 00	.....	.....	.....	.....	.....	1,880 00	640 00	.....	.....	19,232 20
47	52,160.0	20	10,432 00	.....	.....	.....	.....	.....	8,460 50	.....	.....	.....	1,100 00	640 00	.....	.....	20,632 50
48	57,022.0	20	11,404 40	28	10	44,580 25	3,287 80	1,754 65	4,230 50	.....	.....	.....	2,880 00	640 00	.....	.....	68,777 60
49	103,830.0	15	15,574 50	{†29 †30}	....	91,460 50	3,287 80	2,612 20	4,138 75	.....	.....	.....	2,320 00	640 00	.....	.....	120,033 75
50	7,500.0	15	1,125 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,000 00	.....	Dam Rock R.	84,500 00	94,625 00
51	6,653.0	15	997 95	.....	.....	.....	.....	.....	.....	.....	.....	.....	15,000 00	320 00	.....	.....	16,317 95
52	68,421.0	15	10,263 15	.....	.....	.....	.....	.....	2,227 50	7,040 00	.....	.....	440 00	640 00	Guard lock ..	32,045 79	52,656 44
53	53,642.0	15	8,046 30	.....	.....	.....	8,943 70	.....	.....	.....	.....	.....	660 00	640 00	.....	.....	18,290 00
54	72,629.0	15	10,804 35	.....	.....	.....	.....	.....	4,108 25	.....	.....	.....	880 00	640 00	.....	.....	16,432 60
55	69,364.0	15	10,404 60	.....	.....	.....	.....	.....	.....	.....	.....	.....	660 00	640 00	.....	.....	11,704 60
56	56,678.0	15	8,501 70	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....	9,361 70
57	54,087.0	15	8,113 05	.....	.....	.....	.....	.....	4,200 00	.....	.....	.....	440 00	640 00	.....	.....	13,393 05
58	106,569.0	15	15,985 35	31	16	85,455 50	.....	.....	.....	.....	.....	.....	660 00	640 00	.....	.....	102,740 85
59	200,319.0	15	30,047 85	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....	30,907 85
60	180,615.0	15	27,092 25	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....	27,952 25
61	159,947.0	15	23,992 05	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....	24,852 05
62	118,461.0	15	17,769 15	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....	18,629 15
63	109.393,0	15	16,804 95	.....	.....	.....	.....	.....	.....	.....	.....	.....	220 00	640 00	.....	.....	17,268 95
64	136,792.0	15	20,518 80	.....	.....	.....	.....	.....	11,422 00	16,923 00	.....	.....	440 00	640 00	Basin, Miss. R.	14,633 80	64,577 60
			1,024,808 75	.....	.....	1,393,350 50	184,262 03	89,964 15	150,497 75	35,942 54	291,212 81	133,056 00	134,050 00	37,600 00	.....	195,482 72	3,770,227 25
Ten (10) per cent. for contingencies, &c																	377,022 73
Total																	4,147,249 98

* Each.

† 10½ each.

Estimate for cost of construction of the Hennepin Canal—Continued.

MAIN LINE TO WATERTOWN.

Miles from Illinois River.	Earthwork.			Lift-locks.			Cost of culverts.	Cost of weirs.	Bridges.		Cost of aqueduct.	Cost of concrete lining, at $6 per cubic yard.	Cost of right of way, and special damages.	Cost of fencing, at $1 per rod.	Special work.		Amounts.
	Cubic yards.	Price per yard.	Cost.	No. of lock.	Lift.	Cost.			Highway, cost.	Railroad, cost.					Kind.	Cost.	
					Ft.												
25	.....	.....	$470,301 15	....	....	$1,001,320 75	$107,289 73	$30,636 00	$65,360 25	$11,979 54	$299,211 39	$110,880 00	$54,090 00	$13,600	.....	$64,303 13	$2,228,971 94
26	66,248.0	$0 20	13,249 60	24	10	44,580 25	13,415 55	.....	5,700 00	.....	.....	.....	880 00	640	.....	.....	78,465 40
27	73,356.0	20	14,671 20	....	....	.....	8,943 70	.....	.....	.....	.....	.....	1,660 00	640	.....	.....	25,914 90
28	73,219.0	20	14,643 80	....	....	.....	.....	.....	4,200 00	.....	.....	.....	2,320 00	640	.....	.....	21,803 80
29	66,409.0	20	13,281 80	25	10	44,580 25	.....	2,143 50	1,500 00	.....	.....	.....	880 00	640	.....	.....	63,025 55
30	51,748.0	15	7,762 20	....	....	.....	17,887 40	.....	.....	.....	.....	.....	220 00	640	.....	.....	26,509 60
31	52,928.0	15	7,939 20	....	....	.....	.....	.....	.....	.....	.....	.....	1,440 00	640	.....	.....	10,019 20
32	53,497.0	15	8,024 55	....	....	.....	4,943 30	.....	.....	.....	.....	.....	660 00	640	.....	.....	14,267 85
33	71,495.0	15	10,724 25	....	....	.....	13,415 55	.....	.....	.....	.....	.....	1,660 00	640	.....	.....	26,439 80
34	80,739.0	20	16,147 80	....	....	.....	1,655 50	.....	4,200 00	.....	.....	.....	1,880 00	640	.....	.....	24,523 30
35	83,442.0	20	16,688 40	....	....	.....	3,410 30	.....	.....	.....	.....	.....	1,880 00	640	Mud Creek overflow.	40,439 50	63,058 20
36	61,514.0	20	12,302 80	....	....	.....	3,410 30	.....	.....	.....	.....	.....	1,660 00	640	West Branch overflow.	19,004 50	37,017 60
37	93,662.0	20	18,732 40	26	9	43,477 75	3,410 30	2,143 50	5,700 00	.....	.....	44,352 00	880 00	640	.....	.....	119,335 95
38	100,718.0	20	20,143 60	....	....	.....	.....	.....	.....	.....	.....	.....	2,100 00	640	.....	.....	22,883 60
39	57,090.0	20	11,418 00	....	....	.....	.....	.....	4,200 00	.....	.....	.....	440 00	640	.....	.....	16,698 00
40	45,512.0	20	9,102 40	....	....	.....	1,655 50	.....	4,200 00	.....	.....	.....	1,160 00	640	.....	.....	16,757 90
41	55,943.0	20	11,188 60	....	....	.....	4,046 00	.....	4,200 00	.....	.....	.....	880 00	640	.....	.....	20,954 60
42	55,151.0	20	11,030 20	....	....	.....	.....	.....	.....	.....	.....	.....	1,880 00	640	.....	.....	13,550 20
43	84,625.0	20	16,725 00	....	....	.....	1,655 50	.....	8,400 00	.....	.....	.....	880 00	640	.....	.....	28,300 50
44	42,904.0	20	8,580 80	....	....	.....	.....	.....	4,200 00	.....	28,128 00	.....	2,320 00	640	.....	.....	43,868 80
45	72,944.0	20	14,588 80	....	....	.....	4,046 00	.....	4,200 00	.....	.....	.....	2,320 00	640	.....	.....	25,794 80
46	110,586.0	20	22,117 20	....	....	.....	8,671 00	.....	4,200 00	.....	.....	.....	1,880 00	640	.....	.....	37,508 20
47	91,709.0	20	18,341 80	27	8	42,727 75	5,668 40	2,143 50	4,200 00	.....	.....	.....	1,880 00	640	Riprap	1,172 00	76,773 45.
48	61,862.0	20	12,372 40	....	....	.....	16,703 35	.....	4,200 00	.....	.....	.....	880 00	640	....do	2,930 00	37,725 75
49	58,363.0	20	11,672 60	....	....	.....	1,655 50	.....	4,200 00	.....	.....	.....	1,600 00	640	.....	.....	19,768 10
50	69,065.0	20	13,813 00	....	....	.....	25,626 68	.....	.....	.....	.....	.....	3,160 00	640	.....	.....	43,239 68
51	70,525.0	20	14,105 00	....	....	.....	7,323 90	.....	.....	.....	.....	11,088 00	1,880 00	640	.....	.....	35,036 90
52	100,135.0	20	20,027 00	....	....	.....	14,132 09	.....	.....	.....	.....	22,176 00	2,880 00	640	.....	.....	59,855 09

53	81,740.0	20	16,348 00	28	10	44,580 25	13,342 23	2,183 50				11,088 00	4,820 00	640				93,001 98
54	110,664.0	20	22,032 80	29	11	45,682 75	10,030 31	1,714 80	1,500 00			44,352 00	2,100 00	640				128,052 66
55	57,486.0	20	11,497 20				5,140 80					44,352 00	1,320 00	320				62,630 00
56	59,591.0	20	11,918 20				7,123 90					33,264 00	880 00	320				53,506 10
57	73,580.0	20	14,716 00				4,966 50			15,000 00		11,088 00	2,100 00	320	Rock excav	5,867 00		54,057 50
58	186,529.0	20	37,305 80				3,311 00		6,000 00				1,160 00	320	Riprap	1,172 00		49,268 80
59	403,861.0	20	80,772 20						12,700 00		86,184 00	22,176 00	11,100 00	320	do	1,172 00		214,424 20
60	145,355.0	20	29,071 00							12,999 00		22,176 00	2,600 00	640				67,486 00
61	101,384.0	20	20,276 80	30	8	42,727 75		1,714 80			323,190 00		880 00	640				389,429 35
62	72,693.0	20	14,538 60				1,655 50		8,400 00				2,920 00	640				28,154 10
63	111,922.0	20	22,384 40							10,833 00			3,320 00	640				37,177 40
64	84,866.0	20	16,973 20	31	10	44,580 25		1,714 80	4,200 00				3,200 00	640				71,308 25
65	24,191.0	20	4,838 20	32	13	81,432 48	3,485 30	1,714 80	1,500 00	7,040 00			370 00	182	Basin	18,775 00		
															Guard-gates	4,272 77		
															Riprap	2,930 00		
															Rock excav	426,666 60		553,207 15
			1,142,367 95			1,435,690 23	318,021 09	46,109 20	167,160 25	57,851 54	736,713 39	376,992 00	132,820 00	37,142		588,704 50		5,039,572 15
Add 10 per cent. for contingencies, &c																		503,957 21
Total																		5,543,529 36

Estimate for cost of construction of the Hennepin Canal—Continued.

MAIN LINE TO ROCK ISLAND.

Miles from Illinois River.	Earthwork.			Lift-locks.			Cost of culvert.	Cost of weirs.	Bridges.		Cost of aqueduct.	Cost of concrete lining, at $6 per cubic yard.	Cost of right of way, and special damages.	Cost of fencing, at $1 per rod.	Special work.		Amounts.
	Cubic yards.	Cost per yard.	Cost.	No. of lock.	Lift.	Cost.			Highway, cost.	Railroad, cost.					Kind.	Cost.	
					Ft.												
57	.....	.....	$916,207 55	....	....	$1,266,949 75	$309,569 29	$100,408 80	$134,360 25	$26,979 54	$327,339 39	$332,640	$107.270	$33,120	....	$74,272 13	$3,629,116 70
58	76,628.0	$0 20	15,325 60	30	10	44,580 25	3,311 00	1,714 65	6,000 00	.....	.....	.....	1,160	320	Riprap	1,172 00	73,583 50
59	34,108.0	20	6,821 60	31	6	64,580 00	1,655 50	1,714 65	.....	22,000 00	.....	.....	3,160	640	....	.....	100,571 75
60	56,662.0	20	11,332 40	32	5	64,580 00	.....	.....	11,200 00	12,440 00	.....	.....	1,910	640	Dam, Green river	13,000 00	115,102 40
61	5,037.0	20	1,007 40	....	....	.....	.....	.....	.....	.....	.....	.....	1,420	640	....	.....	3,067 40
62	29,633.0	20	5,926 60	....	....	.....	.....	.....	.....	.....	.....	.....	6,220	320	....	.....	12,466 60
63	.....	.....	.....	....	....	.....	.....	.....	.....	.....	.....	.....	6,000	.....	....	.....	6,000 00
64	.....	.....	.....	....	....	.....	.....	.....	.....	.....	.....	.....	6,000	.....	....	.....	6,000 00
65	.....	.....	.....	33	5	64,580 00	.....	.....	.....	.....	.....	.....	3,000	.....	Dam, Rock river	65,000 00	132,580 00
68	.....	.....	.....	....	....	.....	.....	.....	18,800 00	.....	.....	.....	.....	.....	....	.....	18,800 00
71	.....	.....	.....	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Levee	5,000 00	5,000 00
72	.....	.....	.....	....	....	.....	1,655 50	.....	6,000 00	7,500 00	.....	.....	90	.....	Dam, Rock river	90,000 00	.....
															Levee	3,000 00	.....
															Guard lock	32,045 79	140,291 29
73	219,756.0	20	43,951 20	....	....	.....	3,485 30	.....	.....	.....	.....	44,352	2,500	320	Riprap	10,000 00	.....
															Rock excav	36,828 00	141,436 50
74	106,619.0	20	21,323 80	....	....	.....	20,554 60	.....	.....	.....	.....	.....	3,700	640	Riprap	5,000 00	51,218 40
75	34,743.0	20	6,948 60	{34 & 35}	9ea	100,000 00	.....	4,327 00	4,200 00	.....	.....	.....	1,100	320	Riprap	1,300 00	118,195 60
			1,028,844 75	....	....	1,605,270 00	340,231 19	108,165 10	180,560 25	68,919 54	327,339 39	376,992	143,530	36,960	....	336,617 92	4,553,430 14
Add 10 per cent. for contingencies, &c																	455,343 01
Total																	5,008,773 15

Estimate for cost of construction of the Hennepin Canal—Continued.

FEEDER BRANCH.

Miles from Dixon, Ill.	Earthwork.			Culverts.	Weirs.	Bridges.		Cost of aqueducts.	Cost of concrete lining, at $6 per cubic yard.	Cost of right of way, and special damages.	Cost of fencing at $1 per rod.	Special work.		Amounts.
	Cubic yards.	Price per yard.	Cost.	Cost.	Cost.	Highway, cost.	Railroad, cost.					Kind.	Cost.	
1	64,323.0	$0 20	$12,864 60	$10,230 90	.....	$2,920 00	$5,800 00	.....	.....	$12,000 00	$320 00	Bulkhead	$14,242 58	.....
							710,317 00	.....	.....	.....	.....	Basin	1,258 20	.....
												Retaining wall	150,045 00	.....
												Riprap	5,860 00	$225,858 28
2	129,007.0	20	25,801 40	2,754 70	.....	5,250 00	.....	.....	.....	6,600 00	320 00	.....do	11,721 00	52,447 10
3	54,236.0	20	10,847 20	8,518 38	.....	.....	.....	.....	.....	3,800 00	320 00	.....do	11,721 00	35,206 58
4	82,194.0	20	16,438 80	15,093 98	.....	.....	.....	.....	.....	880 00	320 00	.....do	8,791 00	41,523 78
												.....do	11,721 00	.....
5	116,935.0	20	23,387 00	1,655 50	.....	.....	.....	.....	.....	4,540 00	640 00	Rock excavation	6,679 00	48,622 50
6	63,346.0	20	12,669 20	.....	.....	.....	.....	.....	.....	1,660 00	640 00	Riprap	11,721 00	26,690 20
7	84,096.0	20	16,819 20	1,655 50	.....	.....	.....	.....	.....	3,820 00	640 00	.....do	3,907 00	26,841 70
8	79,594.0	20	15,918 80	3,311 00	.....	.....	.....	.....	.....	4,360 00	640 00	.....	5,860 00	30,089 80
9	69,836.0	20	13,967 20	.....	.....	.....	7,040 00	.....	.....	3,540 00	640 00	.....	.....	25,187 20
10	116,808.0	20	23,361 60	8,210 80	$4,286 00	.....	.....	.....	.....	660 00	640 00	Riprap	11,721 00	48,879 40
11	108,596.0	20	21,719 20	8,210 80	.....	4,250 00	.....	.....	$11,088 00	2,820 00	640 00	.....do	5,860 00	54,588 00
12	86,313.0	20	17,262 60	13,641 20	.....	.....	7,040 00	.....	.....	3,540 00	640 00	.....	.....	42,123 80
13	107,507.0	20	21,501 40	.....	.....	.....	.....	.....	.....	3,540 00	640 00	.....	.....	25,681 40
14	137,236.0	20	27,447 20	1,509 40	.....	4,250 00	.....	.....	.....	2,100 00	640 00	.....	.....	39,946 60
15	173,015.0	20	34,603 00	.....	.....	.....	.....	.....	.....	1,660 00	640 00	.....	.....	36,903 00
16	148,199.0	20	29,639 80	.....	12,858 00	4,250 00	.....	.....	.....	1,660 00	640 00	.....	.....	49,047 80
17	117,645.0	20	23,529 00	2,754 70	.....	4,250 00	.....	.....	.....	880 00	640 00	.....	.....	32,053 70
18	79,048.0	20	15,809 60	.....	.....	4,250 00	.....	.....	.....	2,100 00	640 00	.....	.....	22,799 60
19	67,360.0	20	13,472 00	2,754 70	.....	.....	.....	.....	.....	3,100 00	640 00	.....	.....	19,966 70
20	103,025.0	20	20,605 00	.....	.....	4,250 00	.....	.....	.....	2,100 00	640 00	.....	.....	27,595 00
21	105,933.0	20	21,186 60	.....	.....	4,250 00	.....	.....	.....	2,100 00	640 00	.....	.....	28,176 60
22	99,192.0	20	19,838 40	2,754 70	.....	4,250 00	.....	.....	.....	2,100 00	640 00	.....	.....	29,583 10
23	105,219.0	20	21,043 80	2,754 70	.....	4,250 00	7,040 00	.....	.....	1,100 00	640 00	.....	.....	36,828 50
24	63,847.0	20	12,769 40	.....	.....	.....	.....	.....	.....	1,660 00	640 00	.....	.....	15,069 40
25	94,256.0	20	18,851 20	.....	.....	.....	.....	.....	.....	1,660 00	640 00	.....	.....	21,151 20
26	118,314.0	20	23,662 80	2,944 00	.....	.....	.....	.....	.....	2,880 00	640 00	.....	.....	30,126 80
27	99,299.0	20	19,859 80	1,655 50	.....	4,250 00	.....	.....	.....	3,320 00	640 00	.....	.....	29,725 30

Estimate for cost of construction of the Hennepin Canal—Continued.

FEEDER BRANCH.

Miles from Dixon, Ill.	Earthwork.			Culverts.	Weirs.	Bridges.		Cost of aqueducts.	Cost of concrete lining, at $6 per cubic yard.	Cost of right of way, and special damages.	Cost of fencing, at $1 per rod.	Special work.		Amount.
	Cubic yards.	Price per yard.	Cost.	Cost.	Cost.	Highway, cost.	Railway, cost.					Kind.	Cost.	
28	102,447.0	$0 20	$20,489 40	.....	.....	$4,250 00	.....	.....	.....	$3,820 00	$640 00	.....	.....	$29,199 40
29	75,801.0	20	15,160 20	$1,655 50	.....	.....	.....	.....	.....	3,320 00	610 00	.....	.....	20,775 70
30	106,150.0	20	21,230 00	1,655 50	$5,857 50	4,250 00	.....	$35,160 98	.....	1,820 00	640 00	.....	.....	70,613 98
31	77,089.0	20	15,417 80	3,311 00	.....	8,500 00	.....	.....	.....	1,820 00	640 00	.....	.....	29,688 80
32	95,118.0	20	19,023 60	3,311 00	.....	8,500 00	.....	.....	.....	2,320 00	640 00	.....	.....	33,794 60
33	216,400.0	20	43,280 00	1,655 50	3,429 30	.....	.....	.....	.....	2,320 00	640 00	.....	.....	51,324 80
34	234,995.0	20	46,999 00	.....	.....	.....	.....	.....	.....	3,320 00	640 00	.....	.....	50,959 00
35	76,425.0	20	15,285 00	.....	.....	4,250 00	.....	.....	.....	4,040 00	640 00	.....	.....	24,215 00
36	87,377.0	20	17,475 40	.....	.....	4,250 00	.....	.....	.....	2,540 00	640 00	.....	.....	24,905 40
37	84,414.0	20	16,882 80	3,311 50	5,857 50	4,250 00	.....	.....	.....	2,740 00	640 00	.....	.....	33,681 80
38	4,176.0	20	835 20	.....	.....	.....	.....	.....	.....	770 00	320 00	Guard-lock	$32,045 79	40,962 59
												Basin	6,991 60	.....
			769,954 20	109,310 46	32,288 30	88,920 00	$37,237 00	35,160 98	$11,088 00	109,010 00	22,720 00	.....	300,145 17	1,512,834 11
	Add 10 per cent. for contingencies, &c													151,283 41
	Total													1,664,117 52

Summary of estimated cost of enlarging the Illinois and Michigan Canal.

Items.	Amount.	Total.
Section work	$1,541,678 75	
Locks	448,804 75	
Aqueducts	39,494 00	
Culverts	27,600 00	
Waste-weirs	14,349 00	
Steam-dredge	18,000 00	
		$2,089,926 50
Add 10 per cent. for contingencies		208,992 65
Grand total		2,298,919 15

ORDNANCE OFFICE, WAR DEPARTMENT,
Washington, D. C., March 19, 1886.

SIR: I have the honor to return letter to the Secretary of War, of the 17th instant, from the Hon. J. H. Murphy, House of Representatives, in relation to the proposed Hennepin Canal, and asking "that the views of the Ordnance Department be obtained as to the point at which the junction with the Mississippi River may be so made that the interests of the Government will be best subserved in the transportation of material of war to and from the Rock Island Arsenal and Lake Michigan, under all circumstances," and to report:

The surveys made by the Engineer Department mention three termini on the Mississippi River for the proposed canal, one at Rock Island, 1½ miles below the city; one at Watertown, 8 miles above Rock Island; one near Albany, 29 miles above Rock Island.

In the transportation of war material from the arsenal to the lake frontier by canal, the difficulties to be encountered in reaching the mouth of the canal, especially during freshets and moving ice, would be small going 2 miles down-stream, as compared to the difficulties to be surmounted over miles of rapids and freshet, and through ice, to reach Watertown and Albany, so many miles distant up stream.

The cities of Rock Island, Moline, and Davenport form a very important manufacturing, commercial, and railroad center, with great and growing facilities for producing and moving freight in connection with the canal, and is another reason why in case of war the terminus of the canal should be at Rock Island.

As regards the interest of the United States at the Rock Island Arsenal, both present and future, I am decidedly in favor of the terminus at Rock Island.

Very respectfully, your obedient servant,

S. V. BENÉT,
Brig. Gen., Chief of Ordnance.

The SECRETARY OF WAR.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 80.

CLAIMS ALLOWED UNDER ACT OF JULY 4, 1864.

LETTER

FROM

THE SECRETARY OF THE TREASURY.

TRANSMITTING,

With papers in each case, lists of claims under the act of July 4, 1864, *allowed by accounting officers since January* 14, 1886.

JANUARY 11, 1887.—Referred to the Committee on War Claims and ordered to be printed.

TREASURY DEPARTMENT, *January* 10, 1887.

SIR: In compliance with the second section of the act of Congress approved June 16, 1874 (18 Statutes, page 75), I have the honor to transmit herewith, together with the papers in each case, lists of 993 claims arising under the act of July 4, 1864, examined and allowed by the proper accounting officers since January 14, 1886, amounting to $181,732.57.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

SUMMARY.

States in which claims originated.	No. of claims.	Aggregates allowed.
Tennessee	567	$120,115 35
Kentucky	129	18,524 79
Ohio	64	6,020 74
Missouri	115	18,154 66
West Virginia	36	5,878 35
Maryland	56	10,445 37
Indiana	15	1,745 00
Pennsylvania	7	590 80
Illinois	1	135 00
District of Columbia	3	122 51
Total	993	181,732 57

List of allowances made since January 14, 1886.

TENNESSEE.

No.	Stores.	Claimant.	County.	Amount.
84, 893	Quartermaster..	Allen, Zachariah, deceased, J. M. Winstead, administrator.	Williamson ...	$295 00
85, 670	....do	Adams, Edward L....	Rutherford ...	330 00
85, 465	.. do	Adams, Mary, deceased, Wiley Adams, executor	Blount.....	105 00
85, 717	....do	Andrews, R. D	Williamson ...	125 00
86, 052	....do	Andrews, James A	Sumner.....	125 00
84, 772	....do	Allsup, Brice M. G., deceased, James D. Allsup, administrator.	Lincoln	60 10
85, 416	... do	Ashby, G. W	....do	125 00
87, 180	....do	Allen, Andrew S., deceased, Elizabeth A. Allen, administratrix.	Williamson ...	220 00
87, 506	....do	Arnold, Hays (or Hayes), deceased, J. S. Williams, administrator.	White	265 00
88, 687	....do	Averitt (or Avritt), Jarrat (or Jarritt), deceased, E. M. Shelton, administrator.	Montgomery..	125 00
90, 174	....do	Allen, Valentine, deceased, G. V. Allen, administrator.	Williamson ...	425 00
90, 279	....do	Adkins, Edward.....	Montgomery..	40 00
90, 603	....do	Angel, M. L	Macon.....	125 00
75, 428	....do	Byram, Moses, deceased, John M. Henry, executor.	Robertson	183 66
82, 375	....do	Benton, Green, deceased, Leandor Benton, administrator.	....do	130 00
82, 405	Quartermaster and commissary.	Burns, Drucilla L. C.....	Sevier	132 58
84, 773	Quartermaster..	Banks, Joab	Franklin.....	90 00
83, 724	....do	Baker, Joseph L., deceased, A. C. Cobbel, administrator.	....do	130 00
84, 557	....do	Bales, William, deceased, Perry Cate, administrator.	Knox	87 50
85, 158	....do	Bramlett, Joseph (colored), deceased, Mollie Bramlett, widow.	Giles	40 00
85, 417	....do	Biles, Charles W. H.....	....do	39 06
85, 418	....do	Bryan, William M	Wilson	150 00
85, 574	....do	Batts, John T., deceased, Benj. B. Batts, administrator.	Robertson	219 43
85, 575	....do	Burns, John	Carroll.....	43 00
85, 719	....do	Binkley, B. F., deceased, B. B. Binkley, administrator.	Cheatham	150 00
86, 149	....do	Boyd, Robert W	Stewart.....	125 00
86, 190	.. do	Baker, John W	Robertson	415 00
86, 204	.. do	Bryan, Martha A	Davidson	9 00
86, 277	....do	Bates, John H	Obion	157 50
86, 053	.. do	Buchanan, William D., deceased, Mrs. Selina Buchanan, administratrix.	Williamson ...	125 00
85, 685	....do	Bright, John N., deceased, James A. Bright, administrator.	Greene	125 00
85, 934	....do	Berry, Richard and Basil, both deceased, John B Murrey, administrator of Richard, and Moses E. Cator, executor of Basil.	Williamson ..	527 90
86, 148	....do	Blair, Robert, deceased, M. A. Blair, administrator.	Davidson	104 50
86, 610	....do	Byrom, Henry L.....	Franklin.....	130 00
86, 617	....do	Beasley, John J., deceased, John L. Jacobs, executor.	Williamson ...	135 00
86, 650	....do	Brazelton, John G	Franklin.....	593 50
86, 745	....do	Burdett (or Birdett), Samuel M	Bledsoe	12 00
86, 748	.. do	Bryant, James	McNairy	75 00
36, 463	....do	Bell, Paris D., deceased, W. S. Buchanan, administrator.	Lincoln	355 00
86, 715	.. do	Browning, B. W., deceased, W. A. Browning, administrator.	Dickson	100 00
87, 025	....do	Barnes, John H	Stewart	100 00
87, 061	....do	Burden, William, deceased, William T. Smith, administrator.	White	145 00
29, 775	....do	Byrd, Simeon G	Sumner.....	60 00
87, 408	...do	Brown, William Y., deceased, William H. Stephens, administrator.	Davidson	115 00
87, 964	.. .do	Bowen, Caroline	Dickson	125 00
77, 796	....do	Brown, Jesse (or Jessie) S., deceased, John Brown, administrator.	Rhea	100 00
88, 148	....do	Buchanan, Mrs. J. K. (or E. O.), deceased, A. H. Sharp, administrator.	Davidson	243 75
87, 491	....do	Best, E. L., deceased, E. A. Best, administrator..	Franklin	34 25
87, 475	....do	Billingsly (or Billingsley), James, deceased, Jasper S. Acuff, administrator.	Bledsoe	80 00
88, 487	....do	Bains, A. L., deceased, G. W. Bains, administrator.	Smith.....	781 50

List of allowances made since January 14, 1886—Continued.

TENNESSEE—Continued.

No.	Stores.	Claimant.	County.	Amount.
88, 607	Quartermaster..	Beavers, George W., deceased, James L. Turner, administrator.	Bedford.....	$150 00
60, 249	....do	Brooks, Thomas N., deceased, C. F. Brooks, administrator.	Greene	110 00
83, 725	....do	Bryant, William R., deceased, J. S. Bryant, administrator.	Weakley	150 00
88, 928	....do	Bradford, Mary P	Shelby	500 00
89, 025	....do	Baker, Anderson A	Knox	30 00
89, 056	....do	Brown, Mrs. Aaron V	Davidson	400 00
89, 221	....do	Burney, J. W	Gibson	120 00
87, 505	....do	Bentley, David H., deceased, Mrs. E. C. Blane, administratrix.	....do	140 00
89, 293	....do	Bernard, John, deceased, J. C. Bernard, special administrator.	Sumner.....	1, 305 00
89, 174	....do	Boring, Sterling B	Rutherford...	105 20
89, 237	....do	Bettis, S.T., deceased, William Bettis, special administrator.	James	67 50
89, 691	....do	Box, Elizabeth, deceased, M. O. Box, administrator.	Humphreys ..	250 00
89, 770	....do	Bastin, Thomas, deceased, Nancy and Wyatt H. Bastin, administrators.	Hickman	135 00
89, 788	....do	Brady, William, deceased, J. P. McKnight, administrator.	Dyer	140 00
90, 175	....do	Brents, James M., deceased, Dr. John Cowden, administrator.	Lincoln	400 00
90, 284	....do	Boatright, Joel and John	Giles	300 00
90, 529	....do	Bowden, Mary A	....do	275 00
90, 530	....do	Brown, Avis, deceased, Nicholas D. Malone, administrator.	Davidson	2, 718 00
90, 532	....do	Barnes, William	....do	125 00
90, 846	....do	Bloodworth, William	Sumner.....	115 00
91, 307	....do	Blackwell, William J	Bedford	100 00
79, 724	....do	Bright, Jesse, deceased, John H. Bright, administrator.	Blount.....	125 00
91, 328	....do	Billingsly, A. B	Bledsoe.....	148 70
91, 045	....do	Boothe, William N	Henry	144 00
91, 521	....do	Boles, William	Knox	45 15
82, 866	....do	Baynham, W. J. G., deceased, Alexander Baynham and J. W. Frahern, executors.	Montgomery..	100 00
84, 873	....do	Campbell, James	Stewart.....	100 00
83, 865	....do	Carver, Gerald, deceased, Absalom Holman, administrator.	Overton	125 00
84, 481	....do	Chambers, Henry B., deceased, W. W. Chambers, administrator.	Smith.....	125 00
85, 419	....do	Carr, Meekins, deceased, John M. Hall, administrator.	Dickson	165 00
85, 420	....do	Crosswell, Alfred P., deceased, H. R. Atkinson, administrator.	Stewart.....	130 00
85, 421	....do	Copeland, Asa P	Lincoln	130 00
85, 502	....do	Charles, William P	Coffee	125 00
85, 519	....do	Chambers, W. W	Smith.....	125 00
85, 422	....do	Crutcher, Joel, deceased, Mary J. Crutcher, administratrix.	Putnam	150 00
85, 759	....do	Chastain, Elisha	Wilson	1, 885 00
85, 784	....do	Cry, John A	Blount.....	86 33
85, 808	....do	Carter, William F	Williamson...	558 60
85, 834	....do	Carr, Elijah, deceased, Elizabeth L. Carr, widow.	Putnam.....	10 71
85, 694	....do	Carr, Ira, deceased, John Tucker, administrator.	....do	135 00
86, 054	....do	Carter, Hugh G	Sevier	110 00
86, 105	....do	Cain, John W	Hawkins	40 00
86, 150	....do	Cassey, Herbert	Hardin	17 00
86, 151	....do	Cron, Joseph E	Sumner.....	145 00
86, 533	....do	Chiles, Solomon	Knox	234 50
86, 808	....do	Chitwood, John, deceased, Elizabeth F. Chitwood, widow.	Franklin	19 25
87, 024	....do	Clayton, Morgan, deceased, William N. Cowden administrator.	Marshall.....	150 00
87, 080	....do	Cowan, John R., deceased, Amelia A. Cowan, administratrix.	Davidson	110 00
87, 214	....do	Carter, Charles G., deceased, Frances E. Carter, administratrix.	Wilson	178 00
87, 216	....do	Chamberlain, Jeremiah J	Knox	125 00
86, 865	....do	Carmichael. Thomas, deceased, G. W. and John W. Carmichael, executors.	Williamson ...	97 50
54, 497	....do	Childress, James H., deceased, Mary C. Childress, administratrix.	Madison	310 00
87, 414	....do	Chapman, John P., deceased, J. E. Cooper, administrator.	Marshall	555 00

List of allowances made since January 14, 1886—Continued.

TENNESSEE—Continued.

No.	Stores.	Claimant.	County.	Amount.
87 488	Quartermaster..	Casey, Samuel, deceased, A. F. Whitman, administrator.	Davidson	$300 00
86, 616	....do	Cock, Jarret, deceased, Charles R. Holmes, administrator.	Marshall.....	500 00
87, 409	....do	Coldwell, A. B , deceased, P. O. Coldwell, administrator.	Dickson	450 00
88, 083	....do	Clark, James, deceased, Sarah Clark, administratrix.	Lincoln.....	150 00
88, 549	....do	Carmack, N. H	Davidson	25 00
88, 586	....do	Church, D. J	Hamilton	140 00
88, 765	... do	Coldwell, Thomas H.....	Bedford.....	72 0
89, 000	....do	Charlton, James H.....	Davidson	400 00
89, 028	....do	Clark, Nancy C.....	Bedford.....	100 00
89, 106	....do	Cannon, James J	....do	130 00
89, 246	....do	Cobb, Joseph B.....	Blount.....	100 00
88, 720	....do	Carnes, George W., deceased, J. M. McCloud, executor.	Knox.....	24 00
88, 864	....do	Cross, Thomas, deceased, M. L. Killebrew, administrator.	Montgomery..	189 00
88, 867	....do	Capps, Caleb, deceased, Joseph Creighton, administrator.	Davidson	390 00
89, 634	... do	Campbell, George W., deceased, Sarah and W. J. Campbell, administrators.	....do.	138 40
89, 787	....do	Campbell, Joseph, deceased, William P. Campbell, administrator.	Stewart.....	135 00
90, 213	....do	Cobaugh (or Clabaugh) William	Sevier	115 00
90, 218	....do	Calhoon, James P., deceased, N. J. Calhoon, administrator.	Bedford	190 40
90, 219	....do	Coltart, John, deceased, W. D. Coltart, administrator.	Davidson	30 00
90, 981	....do	Cummings, Newton, deceased, Nancy J. Cummings, widow.	Bedford.....	6 43
90, 915	....do	Collins, William, deceased, Hester Collins, executrix.	....do	110 00
23, 786	....do	Crunk, Nancy (or Nancy J.), formerly Nancy J. Webb.	....do	60 00
91, 388	....do	Cage, John O	Wilson	1, 075 00
26, 707	....do	Crockett, J. T., deceased, J. G. Willis, administrator.	Coffee	52 50
91, 547	....do	Cooney, John	Davidson.....	300 00
91, 272	....do	Conner, John M., deceased, George W. Conner, administrator.	Knox.....	20 00
91, 692	....do	Clark, Jonas	Bledsoe.....	178 00
92, 005	....do	Creswell, R. M., deceased, John E. Creswell, administrator.	Sevier	150 00
84, 635	....do	Dobson, W. R., deceased, J. N. Partlow, administrator.	Wilson	150 00
84, 874	....do	Debow, Samuel C., deceased, J. W. Alexander, administrator.	Obion.....	459 47
83, 323	....do	Dooley, M. T., deceased, F. M. Dooley, administrator.	Maury.....	125 00
85, 090	....do	Dunn, Joseph.....	Cheatham	170 00
85, 520	....do	Dozier, William N.....	....do	145 00
85, 576	....do	Dixon, Edward	Hardeman	40 00
85, 602	....do	Daffron, John	Hamilton	56 25
85, 649	... do	Duncan, Hiram W., deceased, Thomas H. Duncan, administrator.	Hickman	150 00
84, 990	Commissary and quartermaster.	Dunaway, James T	McNairy	175 60
86, 749	Quartermaster..	Dotson, George C.....	Dickson	22 25
87, 437	....do	Dunn, Thomas M., deceased, A. B. Akin, administrator.	Cheatham	9 93
87, 492	....do	Dunn, Samuel H.....	....do	80 00
88, 271	....do	Davis, Luckett, deceased, C. R. Holmes, administrator	Rutherford ...	100 00
88, 293	....do	Dotson, John W.....	Dickson	150 00
88, 179	....do	Dobbins, Foster	Sumner.....	108 00
88, 837	....do	Dillon, William H., deceased, Calvin S. Dillon, surviving executor.	Wilson	120 00
88, 809	....do	Davis, Thomas H., deceased, Joseph C. Eggleston, administrator.	Williamson ...	380 00
52, 519	....do	Douglass, Richard E.....	Sumner.....	57 00
88, 776	.. do	Denney, William, deceased, John C. Maddux, executor.	James	415 20
89, 243	... do	Davis, Frances E., deceased, A. J. Davis, administrator.	Montgomery..	250 00
40, 958	....do	Dickson, Reuben, deceased, E. F. Dickson, administrator.	Franklin.....	63 12
90, 580	....do	Duncan, Charles.....	Anderson	100 00

List of allowances made since January 14, 1886—Continued.

TENNESSEE—Continued.

No.	Stores.	Claimant.	County.	Amount.
90, 793	Quartermaster..	Denny, William	Marion	$13 37
90, 884	....do	Davis, Augusta, deceased, Robert C. Mullen, administrator.	Davidson	172 00
90, 880	....do	Dickson, Enoch N., deceased, Charles R. Holmes, administrator.	Rutherford	715 00
91, 157	...do	Draper, William H	Sumner	200 00
91, 308	....do	Davis, Wootson D	Maury	1, 380 30
91, 464	....do	Dobbins, John J., deceased, Ann R. Dobbins, executrix.	....do	560 00
91, 463	....do	Degnan, Frank	Marion	330 00
89, 692	....do	Desmukes (or Dismukes), John D., deceased, John Tyson, administrator.	Davidson	125 00
92, 088	...do	Denham, James L., deceased, James M. McAfee, administrator.	Lincoln	280 00
81, 952	....do	Edwards, Samuel E., deceased, A. W. Edwards, administrator.	Washington	115 00
85, 056	....do	Edmondson, Charles H., deceased, Margaret Edmondson, administratrix.	Lincoln	4, 799 00
86, 011	....do	Emerson, F. W	Coffee	30 00
86, 152	....do	Ellis, Sarah, deceased, N. R. Marr, administrator	Williamson	100 00
86, 778	....do	Eastwood, William	Cannon	50 00
86, 312	...do	Edwards, James A., deceased, W. C. Morgan, administrator.	Franklin	575 00
87, 155	...do	Elliott, Anthony, deceased, Tenie Head, administratrix.	Sumner	100 00
87, 433	....do	Elmore, or Elnore, Henry C	Benton	100 00
86, 555	...do	Ellis, R. C., deceased, R. E. Ellis, administrator	Sumner	261 25
88, 807	....do	Epperson, Shadrick B	Grainger	53 33
89, 244	....do	Elkins, Ann M	Bedford	120 00
87, 058	....do	Embry, Willis S., deceased, E. A. Best, administrator.	Franklin	75 00
90, 176	....do	Elam James A	Rutherford	13 33
90, 403	....do	Earheart, Thomas, M. D	Davidson	100 00
84, 991	....do	Franklin, Robert D., deceased, Nancy A. Franklin, administratrix.	Jefferson	21 00
85, 091	....do	Fakes, Mrs. Mary	Wilson	250 00
85, 521	....do	Farthing, Enoch	Robertson	150 00
85, 577	....do	Foster, Isaac M., deceased, Alex. W. McKay, administrator.	Maury	95 50
85, 650	....do	Fowler, Susan, or Susannah, deceased, H. W. Sheffield, administrator.	Lincoln	350 00
86, 330	....do	Fisher, Michael B	Bedford	125 00
86, 806	....do	Fields, W. B., deceased, Martha F. Fields, widow	Franklin	18 75
87, 079	....do	Falkenberry, Henry H., deceased, S. M. Falkenberry, administrator.	Williamson	125 00
87, 085	....do	Farmer, Richardson P	Weakley	125 00
87, 435	....do	Fletcher, James, deceased, L. W. Fletcher, administrator.	Robertson	150 00
88, 272	....do	French, Michael	Knox	22 50
88, 076	....do	Farmer, Jonathan, deceased, Josiah Farmer, administrator.	Robertson	40 37
88, 811	....do	Fugitt, Alfred D	Bedford	125 00
90, 464	....do	Fuqua, Samuel, deceased, S. Q. Fuqua, administrator.	Robertson	135 00
91, 154	....do	Feltz, Celia Ann	Davidson	132 40
91, 103	....do	Franklin, Mahala, deceased, Coleman Franklin, administrator.	Franklin	280 00
91, 403	...do	Fulcher, Benjamin C	Sullivan	270 00
91, 389	...do	Fite, Thomas W., deceased, Sarah D. Fite and H. C. Fite, administrators.	De Kalb	125 00
84, 249	....do	Grubbs, William H., deceased, Z. H. Grubbs, executor.	Lincoln	135 00
84, 835	....do	Gracy, F. J. P., deceased, Thomas S. Pittard, administrator.	Giles	715 00
84, 875	....do	Good, Edward	Franklin	35 00
39, 529	....do	Gore, Isaac	Overton	125 00
85, 425	....do	Green, Avery, deceased, O. T. Green, administrator.	White	125 00
85, 785	...do	Gatlin, Sarah	Humphreys	65 00
86, 313	....do	Gray, Henry P., deceased, John B. Gray, administrator.	Williamson	277 00
85, 786	....do	Grace, William M., deceased, A. W. Grace, administrator.	Greene	59 00
87, 156	... do	Gooch, J. W., deceased, J. W. M. Gooch, executor	Robertson	24 00
88, 552	....do	Gunn, Simpson	Coffee	16 00
88, 556	....do	Gassaway, James R	Cannon	110 00
88, 892	....do	Green, John T	Franklin	125 00
88, 932	....do	Glover, Emeline (formerly Patterson)	Grainger	92 00

List of allowances made since January 14, 1886—Continued.

TENNESSEE—Continued.

No.	Stores.	Claimant.	County.	Amount.
88, 863	Quartermaster	Green, Samuel W., deceased, Mary H. Green, administratrix.	Tipton	$385 00
88, 833	do	Green, Isaiah (or Iscah), deceased, Sallie Green, administratrix.	Franklin	125 00
89, 238	do	Grimes, James J	Williamson	75 00
88, 930	do	Goza, Joshua, deceased, Mrs. Ellender Goza, administratrix.	Gibson	140 00
90, 582	do	Goodwin, Arthur A., deceased, James W. Goodwin, administrator.	Lincoln	390 00
90, 525	do	Gannaway, Robert P	Montgomery	722 33
90, 598	do	Green, William M	Davidson	300 00
90, 578	do	Gillaspie, Nathan, deceased, R. J. Gillaspie, administrator.	Franklin	56 25
90, 215	do	Gamble, Moses	Monroe	60 00
91, 624	do	Grimes, S. H	Maury	100 00
91, 953	do	Gray, Mrs. Mary	Stewart	125 00
92, 154	do	Guthrie, W. B	Wilson	270 00
84, 487	do	Hodge, William F., deceased, George J. Moffet, administrator.	Hardin	260 00
84, 486	do	Hatcher, John	McMinn	112 50
75, 308	do	Hall, Henry B., deceased, W. F. Hall, administrator.	Obion	100 00
85, 387	do	Howe, Zebedee	Benton	110 00
85, 467	do	Hollister, Henry H., deceased, Helen H. Hollister, administratrix.	Stewart	306 25
85, 426	do	Hudson, E. H., deceased, Elizabeth Hudson, administratrix.	Wilson	125 00
83, 646	do	Harvey, Abner, deceased, H. Z. T. Hankley, administrator.	Hardeman	230 50
85, 504	do	Holmes, John A., deceased, M. C. Orman, administrator.	Robertson	130 00
85, 952	do	Hendley, William D., deceased, F. J. Hendley, administrator.	Williamson	266 75
86, 107	do	Hampton, D. A	do	24 30
86, 153	do	Harris, Thomas J	Robertson	150 00
86, 154	do	Harrison, James	Lincoln	125 00
86, 155	do	Harris, Gad E	Robertson	150 00
86, 279	do	Haynes, Joseph W	do	120 00
85, 673	do	Harelson, Burges, deceased, W. P. Harelson, administrator.	Obion	12 00
86, 387	do	Hunt, Thomas J	Shelby	125 00
86, 439	do	Holland, Willie, deceased, P. E. Holland, administrator.	Robertson	670 00
86, 316	do	Hill, Francis A., deceased, Francis E. Hill, administrator.	Maury	595 00
86, 776	do	Hamilton, John	Lincoln	1, 350 00
86, 883	do	Hayes, Henry M., deceased, W E. Metzger, administrator.	Davidson	364 50
87, 264	do	Hawkins, James C	Wilson	125 00
49, 251	do	Hodge, Worick (to correct omission in report of January, 1878).	Maury	240 00
87, 431	do	Hoover, John (or John G.)	Fentress	75 00
86, 315	do	Hinton, J. H., deceased, H. R. Hinkle, administrator.	Wayne	300 00
80, 571	do	Hatmaker, Joseph, deceased, Jacob Hatmaker, administrator.	Campbell	40 00
87, 477	do	Harris, C. E., deceased, T. U. Harris, administrator.	Humphreys	135 00
87, 490	do	Hooten, Frederick (colored), deceased, Alexander Hooten (colored), administrator.	Davidson	150 00
87, 835	do	Hooten, William R	do	29 25
85, 787	do	Hague, William L., deceased, Mrs. L. L. Hague, administratrix.	Lincoln	505 00
87, 558	do	Holden, Mitchell, deceased, Benjamin F. Holden, executor.	Franklin	321 70
86, 712	do	Heidsieck, Herman, deceased, Christina Heidsieck, widow.	Shelby	90 00
88, 621	do	Hopkins, Esther A	Franklin	36 75
88, 548	do	Hardin, John R	Lincoln	365 00
86, 775	do	Hamilton, Harvy, deceased, E. K. Hamilton, administrator.	Marion	177 00
88, 622	do	Hester, Nathan, sr., deceased, J. W. Smith, administrator.	Montgomery	125 00
88, 812	do	Hamilton, David	Williamson	132 70
89, 218	do	Hill, Marvel, deceased, M. H. Hill, administrator.	Knox	163 50
89, 199	do	Hawkins, Lucas P	Williamson	115 00
89, 236	do	Hunt, Green W	Cheatham	125 00
89, 240	do	Hill, Stephen	Knox	100 00

List of allowances made since January 14, 1886—Continued.

TENNESSEE—Continued.

No.	Stores.	Claimant.	County.	Amount.
89, 297	Quartermaster..	Hudgens, Dudley, deceased, Wayman L. Gracy, administrator.	White	$240 00
89, 200	....do	Holman, John C., sr., deceased, Wesley C. Holman, administrator.	Robertson	300 00
89, 620	.. do	Holland, John, deceased, C. A. Burr, administrator.	....do	125 00
90, 276	....do	Hamilton, Sumner C	Wilson	125 00
90, 974	....do	Harvey, Jason W., deceased, Priscilla Harvey, widow.	Hamilton	44 00
91, 171	....do	Holmes, Joseph, deceased, Amelia Holmes, widow	Carroll	11 70
90, 925	....do	House, William, deceased, B. C. House, executor.	Sumner	120 00
91, 275	.. do	Henry, Nancy, deceased, John M. Henry, administrator.	....do	150 00
91, 518	....do	Hays, Leander	De Kalb	240 00
91, 160	....do	Hindman, Jesse M., deceased, S. S. Hindman, administrator.	Giles	18 00
91, 406	....do	Hall, J. K. P	Davidson	135 00
92, 020	....do	Huffman, John	Loudon	60 00
91, 861	....do	Henderson, W. J., deceased, A. R. Henderson, administratrix.	Giles	156 00
85, 057	....do	Ivey, James	Montgomery ..	120 00
91, 680	....do	Irvine, Sarah A., formerly Sedberry	Manry	375 00
84, 594	....do	Jones, Sarah E., deceased, V. L. Collier, jr., administrator.	Sumner	42 50
85, 427	....do	Johnston, Calvin	Clay	125 00
82, 487	...do	Jones, Robert, deceased, Charles R. Holmes, administrator.	Rutherford ...	654 00
85, 211	....do	Johnston, James, deceased, R. L. Johnston, administrator.	Williamson ...	382 30
85, 745	....do	Jones, Alfred L., deceased, Eliza J. Jones, widow	Davidson	60 00
85, 789	....do	Johnson, Anderson	Williamson ...	100 00
85, 891	...do	Johnston, Andrew	....do	379 40
85, 936	....do	Jarratt, Devereaux, deceased, Joseph Ransom and John Woods, administrators.	Rutherford ...	156 00
86, 282	...do	Johnson, W. M	Hickman	260 00
86, 331	.. do	Jones, F. A	Robertson	25 00
86, 440	....do	Johnson, Joseph T	Marshall	900 50
86, 472	....do	Jordan, William H	Williamson ...	600 00
86, 691	....do	Jackson, Marion	Dickson	145 00
86, 747	.. do	Jones, Talbert	Cannon	125 00
86, 809	....do	Jones, John	Stewart.....	125 00
86, 829	...do	Joye, William	Knox	13 50
86, 832	...do	John, Jane, deceased, Mary A. Howell, administratrix.	....do	127 54
87, 261	....do	Jacobs, Mary A., deceased, H. B. Morgan, administrator.	Lauderdale ...	125 00
88, 608	....do	Jackson, John J., deceased, Mary Jackson, widow.	Davidson	20 87
88, 484	....do	Jackson, Henry, deceased, John E. Tulloss, executor.	Williamson ...	360 00
88, 330	...do	Johnson, J. L., deceased, R. T. Johnson, administrator.	Davidson	315 50
88, 719	....do	James, J. L., deceased, Anna S. Howerton, administratrix.	Stewart.....	250 00
89, 177	....do	Johnson, A. C	Clay	120 00
34, 433	.. do	Jones, Asa	McNairy	14 25
89, 621	....do	Jones, Lincoln S	Hawkins	125 00
90, 281	.. do	Jackson, Levi	Putnam.....	125 00
90, 976	.. do	Johnson, John	Bledsoe	100 00
91, 046	...do	Jackson, William, deceased, G. W. Jackson, administrator.	Sumner	50 00
91, 173	....do	Jennings, Rial	Wilson	75 00
91, 274	...do	Johnson (or Johnston), Andrew	Williamson ...	370 00
91, 549	....do	Jackson, T. L	Franklin	2 50
87, 057	....do	Jones, Rebecca, deceased, D. J. McComb, administrator.	Giles	435 00
84, 071	... do	Kerr, John, deceased, F. M. White, executor ...	Shelby.....	145 00
84, 250	....do	King, Henry, deceased, J. T. Barnhill, administrator.	McNairy	32 00
85, 984	...do	King, Jethro, deceased, J. T. King, administrator.	Dyer.....	120 00
86, 056	...do	King, James M	Giles	105 00
89, 619	.. do	Kubly, Henry, deceased, John J. Kubly, administrator.	Davidson	78 00
90, 604	...do	Killebrew, Samuel R	Stewart.....	375 00
90, 283	....do	Keith, John L., deceased, J. B. Keith, administrator.	Franklin.....	49 00
91, 159	....do	Kilgore, Charles	Greene	33 50
91, 460	....do	Kannon, William B	Maury	260 00

List of allowances made since January 14, 1886—Continued.

TENNESSEE—Continued.

No.	Stores.	Claimant.	County.	Amount.
85,428	Quartermaster..	Kincaid, Jane E., deceased. Loyal heirs at law: John W. Kincaid, $207.83; Andrew A. Kincaid, $207.83; Thomas J. Kincaid, $207.83; Mary E. Tinkler (*nee* Kincaid), $207.84; the legal guardian of Minnie, infant daughter of Margaret A. McGee (*nee* Kincaid), $207.84.	Fayette	$1,039 17
91,837	....do	Kelley, George T., deceased, W. H. McGee, administrator.	Gibson.....	220 00
84,836	....do	Leech, Daniel R	Dickson	150 00
84,948	....do	Lee, John	Hamilton	115 20
85,129	....do	Larkin, William, deceased, G.W. Larkin, special administrator.	Franklin.....	665 72
85,145	....do	Lipscomb, Willian C., deceased, J. T. Lipscomb, administrator.	....do	687 00
86,713	....do	Leinart, A. L	Union	2 00
86,810	....do	Logan, N. D., deceased, Mary Logan, widow	Obion.....	36 25
86,885	....do	Langford, Pamelia.....	Clay	2,721 00
86,925	....do	Lock, Wesley (colored)	Sumner.....	60 00
87,777	....do	Long, John, deceased, Bridget Long, widow....	Knox	9 00
87,969	....do	Lillard, Jasper	Polk	100 00
87,968	....do	Layman, Preston	Sevier	125 00
88,583	....do	Luttrell, John W	Knox	12 88
88,891	... do	Logan, David	....do	15 00
88,948	....do	Laird, Robert H	Giles	2,605 15
89,242	....do	Longmire, Rufus	Union	34 00
88,653	....do	Luttrell, John H., deceased, Lilburn P. Luttrell, administrator.	Knox	42 25
73,935	Commissary	Long, Nicholas H., deceased, Stephen Long, administrator.	Rhea	75 50
85,720	Quartermaster..	Lynch, G. W., deceased, J. B. Lynch, administrator.	Hawkins	120 00
90,526	... do	Lane, Henry (or Henry D.)	Marshall	260 00
90,848	....do	Lindsay, J. S	Campbell	100 00
90,579	....do	Lively, Beverly, deceased, J. W. Hill, administrator.	Jefferson	42 50
90,795	....do	Lee, J. C.....	Knox	131 00
90,923	....do	Leinart, C. A	Anderson.....	12 00
91,208	... do	Luna, James M.....	Bedford.....	135 00
91,256	....do	Long, Thomas	Knox.	3 20
91,262	... do	Lassiter, William J	Davidson	150 00
84,211	.. do	Moore, Macom M., deceased, James L. Moore, administrator.	Stewart.....	125 00
84,516	....do	McCutchan, Martha G., deceased, M. T. Byrn, administrator.	Williamson ...	250 00
84,993	....do	Maynard, Ezekiel T	Obion.....	120 00
84,577	....do	Morton, Gabriel L., deceased; James H. Morton administrator.	Marshall	130 00
85,522	....do	Marchbanks, Julia F	Putnam.....	1,067 00
85,697	....do	Mitchell, Thomas F	Humphreys ..	125 00
85,121	....do	Mathis, Isabella, deceased, William W. Ellis, administrator..... $140 00	Stewart.....	470 00
85,121	... do	Mathis, James, deceased, William W. Ellis, administrator..... 330 00		
84,549	....do	Magee, John, deceased, James C. Magee, administrator.	McNairy	105 00
85,985	....do	Martin, John, deceased, John H. Savage, administrator.	De Kalb	395 00
86,077	... do	McGuffee, Jesse, deceased, John Tucker, administrator.	Putnam.....	130 00
86,157	... do	McNeilly, Thomas	Humphreys ...	32 00
86,318	.. do	Miller, James.....	Rutherford ...	67 50
86,332	....do	McCool, W. N	Davidson	125 00
80,901	....do	McRae (or McRea), Duncan, deceased, John M. Crowe, administrator.	Maury	625 00
86,474	... do	Moore, Carroll	Hawkins	5 33
85,146	....do	Murphy, James A., deceased, James A. Doughty, administrator.	Knox.....	62 50
85,986	....do	Morris, Elias P., deceased, William T. Morris, administrator.	Robertson	234 00
86,283	... do	Moore, Mary, deceased, H. S. Reynolds, administrator.	Williamson ...	56 00
86,642	....do	Major, William	Wilson	125 00
86,830	....do	Moseley, Thomas F.....	Franklin	21 00
87,086	....do	Morris, Simeon	Carroll.....	100 00
87,129	....do	McMurry, J. M., deceased, Mrs. E. C. McMurry, administratrix.	Davidson	667 50
86,932	... do	Mayberry, George W., deceased, S. S. Hughes and W. J. Floyd, administrators.	Williamson ...	524 00

List of allowances made since January 14, 1886—Continued.

TENNESSEE—Continued.

No.	Stores.	Claimant.	County.	Amount.
86, 926	Quartermaster..	Moore, William, deceased. W. W. Gill, executor, and Virginia Moore Wilhoite, executrix.	Coffee	$52 37
87, 084	....do	Matthews (or Mathews), Jacob, deceased, F. L. Jacobs, administrator.	Rutherford ...	60 00
83, 698	....do	McClelland, Matthew, deceased, Robert A. Turner, administrator.	Knox	36 00
84, 040	....do	McMurry, Martin, deceased, H.W. McMurry, administrator.	Obion.....	270 00
87, 645	....do	McMillan, Daniel	Stewart.....	125 00
87, 554	....do	Mason, John E., deceased, W. F. and R. M. Mason, administrators.	Cannon	240 00
87, 606	....do	McKee, Thomas	Wilson	190 00
87, 939	....do	McCaleb, Archibald	Rhea.....	500 00
86, 866	....do	Martin, John W., deceased, W. L. Jones, administrator.	Franklin.....	16 62
87, 943	....do	McCollum, Alexander J	Lincoln	105 00
88, 388	....do	McMillan, James	Knox...	6 19
74, 942	....do	Martin (or Marlin), K. L., deceased, John Gum, administrator.	Rutherford ...	8 00
88, 551	....do	McCown, Miles H.....	Lincoln.....	150 00
88, 683	....do	Morris, Hiram	Cannon	36 00
88, 684	....do	McElwrath, David M	Bedford.....	125 00
88, 486	....do	Miller, Sallie, deceased, Lewis White, administrator.	Wilson	60 00
88, 742	....do	Miller, W. J	Lincoln.....	75 00
88, 779	....do	Moore, A. E	....do	110 00
88, 810	....do	Monroe, Lutetia E	Shelby.....	420 00
88, 946	....do	McPherson, William.....	Davidson.....	70 00
88, 862	....do	Miller & Co., late members of the firm of, viz, Ferdinand Miller, $6.25; John Dogan, $6.25; Margaret Pegg, widow of P. H. Pegg, deceased, $6.25.	Knox.....	18 75
89, 292	....do	Maddux, Adam, deceased, John C. Maddux, special administrator.	Hamilton	135 00
90, 792	....do	McAlpin, John A., deceased, James T. Dunaway, administrator.	McNairy	447 05
90, 715	....do	McMillan, John A., deceased, Elizabeth D. McMillan, administratrix.	Knox.....	468 24
90, 605	....do	Melvin, Lucinda, deceased, H. M. D. Vaughn, administrator.	Davidson	45 00
89, 789	....do	Mead, Jared, deceased, M. B. Warren, administrator.	Blount.....	125 00
90, 216	....do	Moore, Polly (or Mary) A	Putnam	100 00
89, 685	....do	Myrick, Lynza P	Lincoln.....	125 00
90, 338	....do	Munroe, David W., deceased, Mahala C. Munroe and Marion Munroe, loyal heirs at law.	Fayette.....	100 00
91, 155	....do	Mattock, Simpson, deceased, Maria H. Mattock, widow.	Davidson	21 00
91, 220	....do	May, Mary (or Mary A.).....	Knox.....	12 00
91, 304	....do	McNairy, W.H., deceased, Elizabeth P. McNairy, administrator.	Davidson	493 00
91, 550	....do	Mankin, John W	Coffee	250 00
91, 553	....do	Matlock, Gabriel	Davidson	44 00
91, 681	....do	Morris, Matt. (or Matthew), deceased, W. C. Willey, administrator.	Humphreys ..	130 00
91, 384	....do	McKissack, John W., deceased, W. H. Bunch, administrator.	Maury	150 00
91, 812	....do	Morgan, Martin, deceased, Mary Morgan, widow.	Rhea	24 00
91, 683	....do	Mize, Jonathan, deceased, Nancy Mize, widow .	Sevier	100 00
90, 406	....do	McElwee, Samuel S., deceased, Mrs. H. O. McElwee, administratrix.	Madison	120 00
84, 953	....do	Nicholson, George	Roane	31 80
84, 756	....do	Neil, William B., deceased, Stephen H. Rogers, administrator.	Sullivan	300 00
85, 383	....do	North, Elizabeth D., formerly Elizabeth D. Barton	Smith	125 00
86, 572	....do	Neely, Joshua	Davidson	125 00
86, 863	....do	Nix, William Y.....	Lincoln	100 00
87, 970	....do	Neely, Elias H	....do	130 00
87, 782	....do	Norcum (or Markham), T. J	Shelby.....	140 00
91, 020	....do	Nuckles, William	Franklin.....	125 00
90, 791	....do	Nerren, Benjamin F	Lincoln.....	260 00
90, 409	....do	Nicholson, Cordy or Corda, deceased, Benjamin Grigsby, administrator.	Williamson ...	1, 950 00
90, 790	....do	Nuckols, Spotwood, deceased, Elizabeth Walker, Nancy A. Cassady, and John Nuckols, heirs at law.	Grainger.....	2 40
90, 584	....do	Neal, John B.....	Sumner	250 00
85, 212	....do	Oldham, Richard	Davidson	135 00

List of allowances made since January 14, 1886—Continued.

TENNESSEE—Continued.

No.	Stores.	Claimant.	County.	Amount.
86,319	Quartermaster..	Oldham, George W., deceased, Thomas J. Oldham, administrator.	Smith.....	$150 00
87,081	....do.....	O'Leary, Daniel, deceased, Mary O'Leary, administratrix.	Williamson...	75 00
87,604	... do.....	Oliver, William R.....	Sumner.....	50 00
88,529	....do.....	Orgain, B. S., deceased, Mrs. B. S. Orgain, administratrix.	Davidson.....	230 00
88,744	....do.....	Owen, John F., deceased, John Y. Hutchison, administrator.	Robertson....	125 00
34,430	....do.....	Olive, Archibald.....	McNairy....	45 75
84,714	....do.....	Prosser, J. E.....	Marshall.....	520 00
84,757	....do.....	Payne, Joseph, deceased, John R. Nelson, administrator.	Knox.....	20 00
85,698	.. do.....	Parker, William.....	Stewart.....	125 00
86,512	....do.....	Polk, Robert.....	Hardeman....	195 00
86,867	...do.....	Payne, Boliver (or Bolivar).....	Robertson....	11 70
88,835	.. do.....	Powell, James L.....	Davidson.....	170 00
88,945	....do.....	Parton, R. J. and William, both deceased, Mrs. Conney (or Conny) Parton, administratrix; as administratrix of R. J., $153; of William, $51.	Marion.....	204 00
88,701	....do.....	Patterson, Bernard M., deceased, Thomas S. Gallaway, administrator.	Fayette.....	1,480 00
90,278	....do.....	Prosser, Perry G.....	Lincoln.....	145 00
91,100	.. do.....	Page, Robert, sr., deceased, Samuel P. Plummer, administrator.	Davidson....	136 40
90,766	....do.....	Phillips, Charles (or Chas. C.), deceased, Francis M. Phillips administrator.	Stewart.....	90 00
91,176	....do.....	Pittman, William, deceased, Thomas J. Deaton, administrator.	Shelby.....	277 50
91,519	....do.....	Panter, Mary, deceased, Sarah P. Panter, administratrix.	Bledsoe.....	132 50
88,585	....do.....	Pollard, Elizabeth, deceased, R. L. C. White, administrator.	Wilson.....	107 50
84,492	....do.....	Rains, H. G., deceased, Mrs. Margaret A. Rains, administratrix.	McNairy.....	116 50
84,876	....do.....	Rogers, George W.....	Hamilton.....	118 00
34,417	....do.....	Ray, John.....	McNairy.....	24 50
85,953	....do.....	Russell, W. B.....	Montgomery..	300 00
34,414	....do.....	Ray, Mary.....	McNairy.....	70 00
86,513	....do.....	Reeder, Martha (formerly Clift).....	Knox.....	22 50
85,721	....do.....	Reams, E. H., deceased, W. C. Fleming, administrator.	Williamson...	125 00
86,535	....do.....	Russell, Nathaniel.....	Robertson....	135 00
86,807	....do.....	Rakes, Jane (formerly J. Walden).....	Wilson.....	120 00
85,760	....do.....	Richard, E. D., deceased, Cecelia A. C. Birkinbine (formerly Richard), administratrix.	Davidson.....	19 50
85,809	....do.....	Rowe, Henry P., deceased, D. C. Sherrell, administrator.	Lincoln.....	135 00
87,262	....do.....	Ryan, Harris.....	Rhea.....	56 00
87,263	.. do.....	Russell, Robert.....	Knox.....	45 00
87,476	...do.....	Riggle, Daniel.....	Marion.....	221 67
87,971	....do.....	Robertson, Frederick, deceased, A. Buchanan, administrator.	Davidson....	250 00
89,247	....do.....	Rolls, Franklin, deceased, Dinah Rolls, widow	Stewart.....	15 00
90,916	....do.....	Renfro, Isaac, deceased, Daniel O'Connell, administrator.	Shelby.....	150 00
91,434	....do.....	Rush, William B.....	Cumberland..	113 00
91,545	....do.....	Ransom, Whitmel.....	Rutherford...	1,202 00
84,877	.. do.....	Sims, Elisha S.....	... do.....	21 50
81,452	....so.....	Smith, David B., deceased, H. D. Smith, administrator.	Lincoln.....	105 00
84,949	....do.....	Shanks, Craven M.....	Putnam.....	140 00
85,059	....do.....	Stevens, Benjamin, deceased, Mrs. Lucy A. Stevens, administratrix.	Williamson...	169 00
84,992	....do.....	Smith, Jacob, deceased, H. J. Hildebrand, administrator.	Robertson ..	420 00
85,505	....do.....	Scott, William H., deceased, R. T. Scott, administrator.	Cheatham....	135 00
85,653	....do.....	Stine, Martha E.....	Sullivan.....	115 00
85,579	....do.....	Sullivan, B. T., deceased, W. P. Sullivan, executor.	Wilson.....	460 00
85,790	....do.....	Simril, Rachel, deceased, D. L. Simril, administrator.	White.....	125 00
85,892	....do.....	Smith, Theodore A.....	Hardeman....	125 00
84,550	....do.....	Stone, William R., deceased, P. C. Smithson, administrator.	Marshall.....	325 00
86,514	....do.....	Smith, Capel B., deceased, Martha E. Smith, widow.	Lawrence.....	30 00
86,536	....do.....	Sawyer, James R.....	Williamson...	135 00

List of allowances made since January 14, 1886—Continued.

TENNESSEE—Continued.

No.	Stores.	Claimant.	County.	Amount.
86, 537	Quartermaster..	Soyars, Alexander B	Robertson	$115 00
73, 939	....do	Shockley, William, deceased, James Shockley, administrator.	Grainger.....	5 00
86, 958	....do	Sharp, James M., sr	Sevier	828 50
86, 959	.. do	Skelly, William, deceased, John T. Bingham, administrator.	Williamson ...	125 00
80, 408	... do	Shorter, John W., deceased, J. E. Shorter, administrator.	Henderson....	115 00
86, 884	.. do	Smith, J. M., deceased, C. W. Smith, administrator	Wilson	250 00
87, 557	....do	Seagraves, S. T., deceased, Samuel A. Seagraves, administrator.	....do	435 00
87, 967	....do	Stephenson, E. D	Davidson	153 60
88, 082	....do	Skipereth, Henry	Blount.....	55 00
88, 414	....do	Satterfield, B. B., deceased, John S. Satterfield, administrator.	Hickman	400 00
86, 932	....do	Stewart, Henry, deceased, T. H. and A. W. Stewart, executors.	Davidson	120 00
88, 214	....do	Smith, Martha	Knox	23 00
88, 047	....do	Simmons, James L., deceased, W. E. Simmons, administrator.	Williamson ..	125 00
88, 777	... do	Stewart, Isaac N., deceased, L. N M. Cook, administrator.	Wilson	250 00
88, 702	....do	Simmons, M. F., deceased, J. F. Huddleston, administrator.	Davidson	130 00
89, 201	....do	Smith, G. E	Humphreys ..	435 00
89, 248	... do	Saucer, Devreaux	Shelby.....	45 00
89, 198	....do	Stark, Presley W., deceased, George M. Stark, administrator.	Robertson	125 00
88, 587	... do	Snoddy, Nancy, deceased, Price M. Snoddy, administrator.	Lincoln.....	150 00
90, 277	....do	Snead, Robert, deceased, Samantha M. Snead, executrix.	Knox	176 80
90, 602	....do	Smith, William	...do	17 25
90, 712	... do	Smith, David M	Lincoln.....	140 00
90, 466	....do	Smith, Finis	Smith.....	490 00
88, 839	....do	Swafford, James, deceased, Aaron Swafford, administrator.	Bledsoe.....	45 00
91, 014	....do	Stringer, John	Robertson	23 00
91, 546	....do	Skaggs, Eli, deceased, Adeline M. Skaggs, widow.	Knox	40 50
91, 520	....do	Spain, George W., deceased, Mary A. E. Spain, administratrix.	Davidson	240 00
91, 626	....do	Smalley, W. H	Benton.....	150 00
90, 881	....do	Spencer, Egin H	Maury	70 00
92, 101	....do	Shouse, Jacob	Hickman	198 00
85, 122	....do	Thweatt, William R., deceased, John J. Phillips, administrator.	Stewart.....	475 00
83, 581	....do	Tanner, Benjamin, deceased, D. G. Brown, administrator.	Cumberland ..	293 75
85, 162	....do	Thacker, William	Hamilton	80 00
85, 506	... do	Tiller, Beckwith J	Lincoln.....	100 00
85, 093	... do	Taylor, Elizabeth, deceased, John A. Taylor, administrator.	....do	215 00
86, 443	....do	Taylor, Bartley	Dickson	125 00
86, 615	... do	Terry, John	Putnam.....	500 00
85, 468	... do	Tarpley, Jerome B., deceased, Harriet Tarpley, administratrix.	Giles	150 00
86, 931	... do	Talley, Sarah (formerly Sarah Martin)	Lincoln	145 00
87, 158	.. do	Tucker, Preston H	Sumner.....	125 00
88, 413	....do	Tidwell, Lucinda	Dixon	125 00
88, 806	... do	Thurman, Nathaniel	Williamson ...	120 00
86, 475	....do	Thompson, Oliver P., deceased, W. J. Atkins, administrator.	Stewart.....	115 00
88, 547	....do	Thompson, Newcomb, deceased, C. S. Ivie, administrator.	Bedford.....	135 00
91, 156	....do	Thompson, James M	Davidson	8 64
91, 387	....do	Trotter, Benjamin	Humphreys...	150 00
90, 882	....do	Thompson, Wilson N., deceased, W. W. Thompson, administrator.	Davidson	67 50
91, 774	....do	Thompson, Lorenzo W	London	199 27
92, 030	.. do	Thomas, B. C	Warren	104 69
85, 123	....do	Ussery, Mastin, deceased, R. J. Stringfellow, administrator.	Cheatham	149 00
79, 983	Quartermaster and commissary.	Umsted, John, deceased, Mrs. Nancy Umsted, executrix.	Gibson	189 98
86, 573	Quartermaster..	Vaden, D. J	Humphreys ..	125 00
56, 156	....do	Voorhies, Isaac G., deceased, F. J. Ewing, administrator.	Maury	84 33

List of allowances made since January 14, 1886—Continued.

TENNESSEE—Continued.

No.	Stores.	Claimant.	County.	Amount.
88,616	Quartermaster..	Verser (or Vesser), Daniel, deceased, C. C. Verser (or Vesser), executor.	Madison	$475 00
91,047	...do	Vickers, M. M., deceased, Henry H. McGee, administrator.	Stewart.....	265 60
84,759	...do	Wammack (or Wormack), Eliza	Wilson	125 00
84,820	...do	Webster, Margaret R.....	Maury.....	695 00
84,551	....do	Walters, John S., deceased, John M. Walters, executor.	Knox	72 44
65,271	....do	Walker, Sina (or Sinai), deceased, James K. Griffin, administrator.	...do	50 00
85,523	.. do	Wilkes, Mrs. E. O	Giles.....	27 50
85,580	....do	Winston, Noel C., deceased, Nancy C. Winston, surviving executrix.	Smith.....	595 10
26,128	.. do	Woods, James, sr $26 33	Stewart.....	41 68
26,128	...do	Woods, James, jr 6 58		
26,128	....do	Bell, Jane 8 77		
85,988	...do	Wilson, Josiah, deceased, W. A. Wilson, administrator.	Williamson ...	710 00
86,059	.. do	Wade, Richard W., deceased, Mrs. N. F. Wade, administratrix.	Rutherford ...	996 44
86,574	...do	Webb, Daniel C.....	Overton.....	157 71
86,609	...do	Willmore, James M.....	Jackson	140 00
86,777	....do	Williams, C. W	Williamson ...	45 00
86,716	.. do	Warren, Lot, deceased, E. J. Kennedy, administrator.	Franklin.....	200 00
84,930	....do	Woodall, C. N., deceased, R. C. Anderson, administrator.	Robertson	18 75
87,369	.. do	Waggoner, Thomas J., deceased, James F. Waggoner, administrator.	Davidson	270 50
88,079	....do	Worthington, Reuben.....	Bledsoe.....	6 00
86,515	....do	White, Crawford P., deceased, Price M. Snoddy, administrator.	Lincoln.....	125 00
87,415	.. do	Walter, Bernard or Bernhard, deceased, Edward Walter, administrator.	Stewart.....	60 00
86,516	....do	Wyrick (or Worrack), Samuel, deceased, W. H. Wyrick, administrator.	Rhea	30 00
87,942	....do	Webb, Samuel C	Gibson.....	125 00
75,086	....do	Williams, John W., deceased, Sarah L. Williams, administratrix.	Meigs	120 00
88,780	... do	Wine, Daniel S., deceased, Elizabeth J. Wine, widow of.	Blount.....	20 00
88,762	....do	Williams, A. H.....	Cheatham.....	240 00
88,947	....do	Wortham, E. S	Bedford.....	149 00
89,107	....do	Walker, W. H	Bledsoe.....	56 66
88,721	....do	Womack, Henry P., deceased, R. G. Womack, administrator.	Lincoln.....	200 00
88,615	....do	Wilson, Thomas, deceased, James M. D. Wilson, administrator.	....do	125 00
87,157	... do	Watson, Samuel, deceased, Samuel and W. P. Watson, executors.	Davidson	100 00
90,982	.. do	Wright, Lemuel, deceased, J. P. Cawthon, administrator.	Wilson	125 00
77,282	.. do	Walker, James, deceased, Joseph N. Walker, administrator.	Blount.....	85 00
90,979	....do	Wyatt, Sampson	Cumberland ..	125 00
90,869	...do	Weakley, B. F., deceased, Mary E. Weakley, executrix.	Davidson	125 00
90,877	....do	Wade, Willis W., deceased, Mary A. Wade, administratrix.	....do	148 00
90,931	... do	Williams, Mary, deceased, Alice B. Smith, executrix.	Robertson ...	469 25
91,522	....do	Williams, Joseph R	Monroe.....	30 00
91,433	.. do	Wright, William, deceased, W. M. Hindman, administrator.	Maury.....	216 66
79,376	....do	Willmore, Wade H., deceased, James M. Willmore (or Wilmon), administrator.	Jackson	125 00
92,155	....do	Wagoner, J. C	Sumner.....	120 00
88,763	....do	Young, Robert.....	Carroll	475 00
86,446	....do	Yates, Nancy, deceased, W. H. Villiver, administrator.	Robertson	135 00
91,015	....do	Young, William B., deceased, Sallie A. Marlow, administratrix.	Davidson	120 00
91,459	....do	Young, Austin C., deceased, D. W. Young, administrator.	White	218 00
		Total	.....	120,115 35

List of allowances made since January 14, 1886—Continued.

KENTUCKY.

No.	Stores.	Claimant.	County.	Amount.
85, 382	Quartermaster..	Ashbrook, Thomas V., deceased, Felix G. and Samuel J. Ashbrook, executors.	Harrison.....	$211 60
86, 189	... do	Atkins, T. H.....	Adair.....	40 00
85, 210	....do	Ash, John, sr., deceased, Allan V. McKay, administrator $320 50	Nelson.....	598 00
85, 210	... do	Ash, John, jr., deceased, Emily J. Ash, executrix 277 50		
89, 687	....do	Anderson, Alexander, deceased, Susan Anderson, administratrix	Garrard	164 64
84, 755	....do	Barton, John Q	Whitley	18 12
86, 010	....do	Butler, Aurelius R.....	Metcalfe.....	48 00
85, 601	Quartermaster and commissary.	Buckley, Lucinda, deceased, H. M. Buckley, administrator.	Henry	592 40
86, 930	Quartermaster..	Bradshaw, Allen, deceased, John Bean, administrator.	Barren.....	185 00
88, 077	....do	Bunnel, Thomas	Hart.....	85 00
87, 458	....do	Bennett, Hardin D.....	Ohio.....	150 00
88, 553	....do	Beams, Samuel, deceased, Elizabeth Beams, widow.	Whitley	9 00
88, 584	....do	Back, Isaac, deceased, Henry D. Back, administrator.	Breathitt	27 00
89, 108	....do	Baker, J. W	Jackson	285 00
83, 864	....do	Borders, Arthur, deceased, J. W. Dillon, administrator.	Lawrence.....	1, 080 00
88, 617	....do	Brockman, Shelton, deceased, John Brockman, administrator.	Jackson	110 00
84, 989	....do	Collinsworth, David	Magoffin.....	115 00
85, 384	....do	Chapman, Joseph A	Simpson	9 00
65, 840	....do	Clements, George, deceased, George R. and L. F. Clements, executors.	Washington ..	18 00
84, 482	....do	Cogswell, Henry, deceased, Louisa Cogswell, administratrix.	Rowan	180 00
85, 604	....do	Castor (or Kastor), Conrad.....	La Rue	130 00
86, 205	....do	Cunningham, Francis.....	Mercer	72 00
86, 611	....do	Chaney, Washington, deceased, J. R. and Robert B. Chaney, executors.	Allen	140 00
86, 614	....do	Clark. James, deceased, Margaret L. Clark, administratrix.	Boyle.....	147 50
88, 929	....do	Canaday, James.....	Webster.....	125 50
89, 655	....do	Coffey, E. and Tanner, Knacy L. Tanner, surviving partner.	Casey.....	20 00
90, 220	....do	Campbell, Sarah	Madison	210 00
82, 215	....do	Davis, Nancy, deceased, J. T. Lunsford, administrator.	Hopkins	125 00
85, 386	....do	Dishman, Nathan S	Barren.....	150 00
85, 603	....do	Dooms, Matilda.....	Livingston....	125 00
85, 672	....do	Dinning, James, deceased, J. S. Robey, administrator.	Simpson	55 80
88, 999	....do	Drake, Francis A., deceased, Samuel Drake, executor.	Jefferson	25 00
91, 404	....do	Doan, Benjamin J.....	Harrison	150 00
86, 278	....do	Elder, Thomas, deceased, Hardin Purdom, administrator.	Boyle.....	128 00
90, 601	....do	Evans, William W.....	Carter.....	80 00
84, 510	....do	Fields, Daniel S., deceased, James Fields, administrator.	Harlan	60 00
87, 215	....do	Farris, Isaac H. Deceased, W. S. Farris, administrator.	Barren	80 00
79, 964	....do	Fiessinger, Lewis, deceased, Henry D. Allen, administrator.	Union	125 00
85, 546	....do	Guest, E. C	Butler	130 00
86, 192	....do	Gill, William M	Metcalfe.....	8 00
78, 215	....do	Griffin, Eliza (or Eliza A.), deceased, James W. Griffin, administrator.	Garrard	33 50
84, 039	....do	Grady, Benjamin F., deceased, R. N. Adams, administrator.	Todd	140 00
89, 296	....do	Gibbons, James E	Clinton	10 00
85, 000	....do	Howard, Elijah S	Harlan	75 00
85, 788	....do	Hutchens, F. J.....	Cumberland ..	43 57
86, 314	....do	Hampton, Andrew	Harrison.....	150 00
84, 946	....do	Hall, Francis, sr., deceased, James Hall, sr., administrator.	Harlan	60 00
87, 370	....do	Higpight, Moses.....	Knox	41 25
87, 940	....do	Heral, or Herrel, Noah, deceased, Agnes Heral, or Herrel, widow.	Butler	11 25
86, 805	....do	Johns, Charles, deceased, William A., James F. and Charles Johns, executors.	Union	275 00
88, 358	....do	Jones, Zachariah	Hardin	125 00

List of allowances made since January 14, 1886—Continued.

KENTUCKY—Continued.

No.	Stores.	Claimant.	County.	Amount.
91,548	Quartermaster..	Johnson, Richard (colored)	Kenton	$105 00
86,746	....do	Keller, Abraham, deceased, James L. Patterson, administrator.	Harrison	150 00
87,213	....do	Kellems, John, deceased, E. Hurst, executor.	Bell	126 00
87,555	....do	Kelly, Cordelia, deceased, Robert M. Kelly, administrator.	Jefferson	85 80
87,489	....do	Kimberlin, Elizabeth, deceased, W. H. Kimberlin, administrator.	Washington	242 75
88,024	....do	King, Daniel, deceased, J. M. King, administrator	Logan	375 00
91,097	....do	Kemper, Alfred	Gallatin	150 00
32,438	....do	Kurtz, George, deceased, Eliza J. Kurtz, widow	Spencer	40 00
37,842	....do	Lawrence, F. M	Grant	150 00
87,128	....do	Leach, Lucinda	Lawrence	100 00
87,780	....do	Ledford, James	Harlan	35 00
87,944	....do	Ledford, Stephen	....do	90 00
88,485	....do	Livers, Mary, deceased, Charles T. Atkinson, administrator.	Nelson	140 00
85,548	....do	Moberly, James M	Mercer	115 00
86,158	....do	Morgan, John W	Hardin	120 00
86,473	....do	Mayfield, Sallie (or Sally), deceased, B. C. Mayfield, administrator.	Hart	171 00
88,357	....do	Masden, John S	Jefferson	300 00
89,618	....do	Marsee, Henry	Bell	36 00
89,652	....do	McAlister, James, deceased, Mrs. Kate McAlister, widow.	Lincoln	32 00
65,138	....do	Mix, William	Jefferson	318 72
90,710	....do	Morrison, J. R., deceased, A. M. Morrison and J. A. Morrison, administrators.	Oldham	240 00
90,527	....do	McAtee, Martha S., deceased, John Wood, administrator.	Christian	150 00
89,646	....do	Mayo, William J	Floyd	135 00
91,385	....do	Moore, Joel B	Logan	150 00
92,029	....do	Mullins, Richard, sr., deceased, Matthew and Stephen Mullins, administrators.	Pendleton	158 00
85,922	....do	Newman, W. O., deceased, T. H. Murray, administrator.	Metcalfe	185 03
86,159	....do	Nield, Henry	Mercer	142 50
15,516	....do	Newton, Joseph A	Shelby	100 00
77,069	....do	Orear, John D., deceased, Davis Orear, administrator.	Montgomery	54 00
88,273	....do	Owen, Thomas J., deceased, C. J. Owen, administrator.	Logan	130 00
87,412	....do	Owen, John W	Pulaski	125,00
85,063	....do	Percival, Henry S	Kenton	315 00
85,120	....do	Parrish, G. W	Barren	25 00
87,083	....do	Porter, Uriah	Allen	32 00
86,442	....do	Pierson, Will S., deceased, W. W. Pierson, administrator.	Union	150 00
80,348	....do	Purdy, Robert, deceased, Samuel T. Purdy, administrator.	Pendleton	150 00
89,654	....do	Powell, John L	Boyle	495 00
91,552	....do	Poor, Jerry	Grant	140 00
84,818	....do	Redding, John R., and W. F	Barren	77 95
85,835	....do	Robertson, Elisha	Clay	40 00
84,585	....do	Red (or Redd), James, deceased, Alfred Brooks, administrator.	Harrison	150 00
88,761	....do	Rousseau, J. A., deceased, John J. Rousseau, executor.	Wayne	300 00
88,743	....do	Reid, John A., deceased, R. R. Henderson, administrator.	Shelby	70 50
91,345	....do	Roof, Joseph H	McCracken	100 00
84,758	....do	Starr, Henry	....do	75 00
85,674	....do	Steel, Joseph	Whitley	72 47
86,864	....do	Scott, Joseph	Trigg	150 00
86,868	....do	Seay, William A	Graves	100 00
86,882	....do	Stump, Leonard	Harrison	150 00
88,146	....do	Sweeny, Joseph A., deceased, John T. Sweeny, executor.	Jefferson	58 00
75,166	....do	Sublett, James A., jr., deceased, Nancy Sublett, administratrix.	Taylor	307 80
92,134	....do	Smith, Joseph F	Christian	150 00
88,618	....do	Story, S. S., deceased, J. W. Story, L. J. Story, S. H. Story, and M. J. Andrews, executors.	Graves	212 95
85,147	....do	Sanders, Andrew. (*See* "Zehnder.")		
84,819	....do	Troutwine, John	Fulton	52 00
84,929	....do	Terry, John S., deceased, W. J. Lewis and Moses Terry, administrators.	Grayson	125 00
86,057	....do	Tharp (or Thorp), David A. C	....do	23 54

List of allowances made since January 14, 1886—Continued.

KENTUCKY—Continued.

No.	Stores.	Claimant.	County.	Amount.
78, 619	Quartermaster..	Thurmond, H. L., deceased, George T. Ryan, administrator.	Simpson	$600 00
87, 410	....do	Taylor, Linsey	Wolfe	100 00
87, 644	....do	Turner, Julius C	Pendleton ...	140 00
87, 966	....do	Tye, Henry L	Laurel	116 70
89, 002	....do	Tennel, Mary	Anderson	115 00
90, 849	....do	Teater, William	Madison	125 00
91, 691	....do	Terry, Samuel S	Green	115 00
85, 130	....do	Thompson, Emily, deceased, Joseph H. Thompson, administrator.	Jefferson	192 00
86, 831	....do	Underhill, Nancy Jane (formerly Nancy Jane Searcy).	Anderson	115 00
84, 878	....do	Williams, William L	Lincoln	75 00
82, 170	....do	Wiatt, Sidney, deceased, John Wiatt, administrator.	Union	140 00
38, 834	....do	Williams, Robert	Owen	150 00
38, 714	....do	Walker, W. B	....do	150 00
85, 581	....do	Williams, Richard, deceased, Robert Williams, administrator.	....do	125 00
86, 445	....do	Wood (or Word), John	Knox	30 00
86, 774	....do	Warnock, Robert J., $75; Samuel P. Warnock, $75.	Greenup	150 00
33, 819	....do	Wilson, Ebenezer, deceased, John and William D. Wilson, executors.	Estill	64 50
86, 612	....do	Williams, Thomas H	Allen	125 00
89, 026	....do	Wilson, John, deceased, J. W. Jones, administrator.	Barren	120 00
89, 689	....do	Wright, Thaddeus S., sr	Christain	450 00
90, 212	....do	Wiglesworth, Miles (or Myles) S., deceased, John S. Day, administrator.	Harrison	150 00
91, 609	....do	Weller, Nelson (or Nelson H.)	Bullitt	120 00
85, 147	....do	Zehnder (or Sanders) Andrew (or Andreas), deceased, Mary Zehnder, executrix.	Jefferson	105 95
		Total	.....	18, 524 79

OHIO.

87, 398	Quartermaster..	Ambler, John B., deceased, J. S. Ambler, executor.	Guernsey ..	$40 00
90, 714	....do	Aplin, William H	Hocking	100 00
90, 402	....do	Battin, Abraham	Carroll	125 00
90, 608	....do	Brown, Nancy	Guernsey	7 72
90, 847	....do	Burkhead, Joshua	...do	75 00
90, 924	...do	Bartlett, Philip S	Harrison	100 00
91, 102	....do	Bailey, C. D., and William Cherington	Gallia	120 00
91, 326	....do	Baker, Peter (sentenced for life), Mary Baker, wife.	Pike	105 00
74, 668	....do	Caskey, Alexander, deceased, Robert Morrison, administrator.	Adams	50 00
45, 191	...do	Carothers (or Carrothers), James	Harrison	125 00
88, 581	.. do	Copeland, Margaret, deceased, Samuel Copeland, administrator.	Adams	67 20
90, 699	...do	Cline, Francis	Clermont	125 00
91, 339	....do	Crute, James, deceased, James L. Crute, administrator.	Pike	101 10
91, 338	. ..do	Coleman, Robert, deceased, J. W. McClung, administrator.	Adams	100 00
89, 241	.. do	Dager, John, deceased, William D. Cassidy, administrator.	Carroll	50 00
89, 653	....do	Davis, Joseph, jr	Clermont	130 00
90, 702	....do	Davis, James	Brown	65 00
90, 921	....do	Dunham, B. C	Pike	75 00
89, 109	....do	Evans, Meredith	Meigs	16 00
91, 327	... do	Flenniken, John P	Jefferson	200 00
90, 920	....do	Fisher, James A., deceased, Fenton Bagley, administrator.	Muskingum ..	130 00
88, 081	....do	Gregg, John, deceased, John W. and Alexander M. Gregg, administrators.	Pike	12 00
89, 650	....do	Gray, Eli, deceased, Charles W. James, administrator.	Vinton	150 00
90, 524	....do	Gordon, Thomas A., deceased, James Kirkpatrick, administrator.	Harrison	66 00
89, 686	....do	Gatch, Thomas R., deceased, A. M. Gatch, administrator.	Clermont	160 00
88, 292	....do	Harvey, James	Harrison	85 00
44, 868	....do	Harriman, James, deceased, Rachel A. Harriman (or Herriman), administratrix.	....do	127 68

List of allowances made since January 14, 1886—Continued.

OHIO—Continued.

No.	Stores.	Claimant.	County.	Amount.
89,773	Quartermaster..	Hite, Noah, deceased, Elizabeth Hite, widow....	Brown.....	$30 03
89,651	....do.....	Hutchison, George W.....	Guernsey.....	35 00
90,709	....do.....	Hover, William U.....	Allen.....	57 75
91,050	....do.....	Huntley, Henry.....	Gallia.....	85 00
91,856	....do.....	Henning, William L.....	Clermont.....	35 00
87,296	....do.....	Jackson, George.....	Gallia.....	80 00
89,294	....do.....	Knight, James.....	Pike.....	100 00
88,700	....do.....	Koons, Samuel L.....	Morgan.....	200 00
87,397	....do.....	Kirk, James N.....	Jefferson.....	135 00
90,878	....do.....	Koons, Samuel.....	Morgan.....	410 00
91,259	....do.....	Kilpatrick, Samuel P.....	Adams.....	4 28
89,110	....do.....	Love, James, deceased, Eliza Love, widow.....	Meigs.....	42 00
91,857	....do.....	Lyle, James M.....	Clermont.....	135 00
86,956	.. do.....	Morgan, Dr. John.....	Harrison.....	125 00
88,619	....do.....	Moore, Jacob.....	....do.....	135 00
44,993	....do.....	McCotter, William D.....	Guernsey.....	115 00
89,771	... do.....	Moore, Johnson.....	Harrison.....	13 50
44,882	....do.....	Martin, Jonathan.....	....do.....	135 00
90,700	....do.....	Matheney, Eliab.....	Morgan.....	100 00
89,774	....do.....	Newton, Abraham.....	Gallia.....	85 00
92,018	....do.....	Newman, Nathaniel.....	Sciota.....	100 00
88,019	... do.....	Pumphrey, Edward.....	Columbiana...	24 00
91,105	....do.....	Rice, Jacob.....	Meigs.....	20 00
90,850	....do.....	Smith, Uriah.....	Columbiana...	90 00
91,104	....do.....	Shockey, Thomas J.....	Highland.....	70 00
91,174	... do.....	Stewart, Hudson.....	Jefferson.....	26 04
91,153	....do.....	Stansbury, David.....	Meigs.....	20 00
91,258	....do.....	Spencer, Samuel.....	Hocking.....	135 00
91,405	...do.....	Smith, Samuel J.....	Jackson.....	15 00
91,342	....do.....	Smitson, James H.....	Adams.....	100 00
87,963	....do.....	Townsend, David, deceased, Joseph Townsend, surviving administrator.	Harrison.....	40 00
79,212	....do.....	Tall, Nancy, deceased, Mary A. Tall, administratrix.	Meigs.....	120 00
90,883	....do.....	Tudor, William.....	Clermont.....	57 14
90,911	....do.....	Vickers, David.....	Guernsey.....	110 00
88,274	....do.....	Watson, John, deceased, William H. Watson, executor.	Gallia.....	117 33
89,150	....do.....	White, Mary A.....	Meigs.....	286 00
78,124	....do.....	Wilson, Thomas, deceased, S. D. and William H. Wilson, administrators.	Pike.....	125 00
		Total.....	.....	6,020 74

MISSOURI.

86,275	Quartermaster..	Alexander, F. H., deceased, Maggie R. Alexander, administratrix.	Jackson.....	$750 00
84,479	....do.....	Brewer, Olive, deceased, Evan Brewer, administrator.	Barry.....	225 00
85,671	....do.....	Barmer, John, deceased, Mrs. Elizabeth Barmer, widow.	Cass.....	50 00
86,191	....do.....	Berry, Samuel A.....	Barry.....	30 00
88,530	....do.....	Booth, Robert C., deceased, Hannah Booth, executrix.	Dallas.....	75 00
35,849	....do.....	Bradbury, Leonard.....	Cass.....	300 00
87,646	....do.....	Brooks, Eulela, deceased, J. H. Kyle, administrator.	....do.....	188 99
89,690	....do.....	Burnett, Theodore F.....	Monroe.....	100 00
90,918	....do.....	Buckles, T. N.....	Jackson.....	97 50
91,340	....do.....	Black, William.....	Phelps.....	150 00
91,386	....do.....	Bryan, James.....	Vernon.....	16 00
62,668	....do.....	Bowers, John J. S., deceased, George F. Bowers, administrator of. Bowers, William H..... Bowers, George F.....	Jasper and Lawrence.	20 63
85,686	...do.....	Combs, M. C.....	Barry.....	100 00
86,106	....do.....	Cates, John F.....	....do.....	180 00
77,523	...do.....	Campbell, Nicholas, deceased, Albert M. Campbell, administrator.	Benton.....	88 40
88,215	....do.....	Crist, Mary A.....	Cass.....	120 25
17,727	....do.....	Craig, David.....	Morgan.....	30 00
22,604	....do.....	Collins, William W., deceased, Mrs. Sally or Sallie Cheatham, formerly Collins, administratrix.	Henry.....	90 00
89,489	....do.....	Chilton, Mary E.....	Cooper.....	137 00

List of allowances made since January 14, 1886—Continued.

MISSOURI—Continued.

No.	Stores.	Claimant.	County.	Amount.
89,490	Quartermaster ..	Chilton, John J., deceased, Mrs. Bettie Rogers, heir at law.	Cooper	$165 00
89,239	....do	Coker, Peter, deceased, Edward D. Anthony, administrator.	Madison	250 00
89,772	.. do	Castle, Orville	Andrew	27 00
91,270	.. do	Caves, Thomas	Green	64 00
91,524	....do	Cunnyngham, James H. W	Polk	100 00
91,860	....do	Campbell, W. R	Ralls	50 00
85,160	....do	Downs, James A. J	Pettis.....	75 00
87,411	... do	Douglas, Edmond T	Jackson	115 00
85,424	....do	Donica, Henry, deceased, Nancy A. Donica, widow.	Barry.....	100 00
90,408	.. do	Douthit, Henry B., deceased, R. H. Douthit, administrator.	Newton.....	230 00
90,285	....do	De Haven, Barak	Cooper.....	25 00
85,118	....do	Dixon, Ebenezer, deceased, Harriet Dixon, administratrix.	Jackson	150 00
77,905	.. do	Easley, Charles S., deceased, B. B. Cave, administrator.	Cass.....	330 00
91,101	....do	Earney, Wilson C	Crawford	37 50
85,935	....do	Finley, Alfred T	Webster	155 00
87,781	.. do	Frerking, Diedrick	La Fayette....	392 20
22,605	....do	Freeman, James	Henry	100 00
88,048	....do	Fly, Jeremiah N., deceased, Robert Marshall, administrator.	Green	320 00
77,906	....do	Gunn, James M., deceased, J. H. Kyle, administrator.	Cass.....	200 00
87,504	....do	Gibson, Constantia	... do	100 00
87,556	....do	Gibbons, William H	Jackson	960 00
90,211	.. do	Graves, Ellen	Cooper.....	20 00
86,280	... do	Hutcherson, William	Newton.....	72 00
39,532	....do	Harp, Edward	La Fayette....	6 43
88,331	....do	Holschlag, Bernard	Gascouade....	60 00
88,217	... do	Hendricks, Joseph W	Lawrence	168 75
89,245	....do	Head, William C	Jackson	115 00
88,944	....do	Howard, Phillip J., deceased, Nancy Howard, widow.	Douglas	6 12
91,344	....do	Hall, William, deceased, Margaret A. Hall, widow.	Barry	100 00
90,917	....do	Hogan, David, deceased, estate of.....	Cooper.....	540 00
15,748	....do	James, William	Morgan.....	60 00
86,156	....do	Ketchum, Nannie J	Saint Louis...	1,100 00
86,389	....de	King, John, deceased, Highly R. King, administratrix.	Webster.....	100 00
88,022	....do	Knoche, John	Jackson	514 00
90,528	....do	Kessel, Charles, deceased, Elizabeth Kessel, widow.	Chariton.....	100 00
88,180	....do	Kimsey, Samuel, deceased, Thomas J. Anderson, administrator.	Jackson	370 66
88,020	....do	Loyd, William.....	Montgomery..	149 00
88,080	....do	Lee, Charles M	Barry	96 00
88,865	....do	Levi, Jacob I	Jackson	100 00
84,894	....do	Long, Frederick	Cass	60 00
91,409	....do	Luttrell, Sanders	Stone	60 00
91,343	... do	Lemarr, William.....	Bates	125 00
85,092	....do	Mers, Wilson T	Cass	100 00
88,216	....do	McGinnis, David	Morgan.....	16 00
87,294	... do	Myers, William H.....	Cass	168 45
88,025	....do	McClosky, John	Jackson	112 00
88,554	.. do	Moore, William W	... do	470 00
88,746	.. do	McNeil, James	Bates	495 00
89,295	....do	Moles, Paschal.....	Barry.....	185 00
89,616	....do	Mers, Andrew	Cass	220 00
91,099	....do	Morris, John, deceased, Permelia S. Morris, widow	Taney	50 00
14,577	....do	Myers, Harvy.....	Cass	36 00
90,868	....do	McDaniel, F. M	Jasper.....	20 00
91,390	.. do	Morgan, Jacob B., deceased, Spencer M. Morgan, administrator.	Pettis	100 00
91,271	....do	Mayfield, Elisha, deceased, Leander Mayfield and J. D. Lindsey, executors.	Bates	175 00
91,158	....do	Marsh, Madison, S., deceased, J. M. Marsh, administrator.	Chariton.....	110 00
90,919	... do	Osburn, John, deceased, Mary Osburn, widow ...	Christian	10 00
90,607	.. do	Owens, Joseph.....	Laclede.....	16 66
85,429	....do	Parker, Aquila	Cass	120 00
85,699	....do	Perkins, Isaac	Barry.....	60 00
85,923	....do	Parker, Greenberry.....	Cass	465 20
87,266	....do	Page, David R	Christian	220 00
87,607	....do	Phillips, Sanford.....	La Fayette....	120 00
88,832	....do	Peak, Hettie A	Cass	108 00
89,790	... do	Pogue, Ira	Newton.....	70 00

List of allowances made since January 14, 1886—Continued.

MISSOURI—Continued.

No.	Stores.	Claimant.	County.	Amount.
86,534	Quartermaster..	Ruby, John B	Christian	$95 00
87,837	....do	Read (or Reed), Jasper	Jackson	712 50
88,023	....do	Richards, Richard, deceased, Minor T. Smith, administrator, and Elijah T. Richards.	...do	220 00
90,217	....do	Rogers, J. F	Cooper	143 00
90,926	....do	Robinson, Benjamin	Jackson	83 00
91,257	....do	Rickman, Elisha B	Lawrence	39 00
85,763	....do	Samples, Sebern	Newton	80 00
87,060	....do	Simpson, William	Saint Francis	2 67
87,130	....do	Shelton, Green M	Jackson	277 00
87,436	....do	Stoll, John	La Fayette	200 00
88,021	....do	Story, John, deceased, Mary A. Story, widow	McDonald	40 00
88,078	... do	Smith, Seth B	Moniteau	80 00
88,147	....do	Smitz, Carl, deceased, William H. Rodewald, administrator.	Jackson	192 00
89,001	... do	Smith, Abijah, deceased, Lydia Smith, widow	Cole	42 00
89,202	... do	Stevens, John D	Morgan	15 00
90,913	....do	Stroud, Columbus	Lawrence	10 00
91,049	....do	Sanders, Thomas B	Jasper	89 00
87,082	....do	Stover, Charles, deceased, estate of	Jackson	60 00
87,605	... do	Tilman, G. G	Pettis	140 00
91,544	....do	Thornton, William, deceased, Josiah P. Thornton, executor	Texas	130 32
87,459	...do	Uphouse, Caspar Henry	La Fayette	51 00
38,946	.. do	Underwood, John S	Cass	125 00
88,582	.. do	Vanleeuwen, Jacob or J. B	Jackson	250 00
85,987	...do	Welch, David, deceased, Cynthia Welch, widow	Webster	101 50
88,764	....do	Williams, C. A	Livingston	154 68
88,931	....do	Williams, M. S	Lawrence	13 50
89,203	....do	Whitener, Benjamin	Madison	18 75
90,770	.. do	Willis, James R	Buchanan	95 00
90,932	.. do	Williamson, Madison	Monroe	195 00
91,408	.. do	Welch, Thomas	Dent	200 00
87,778	.. do	Yost, George J., deceased, Thomas F. Yost, administrator.	Cass	235 00
		Total		18,154 66

WEST VIRGINIA.

90,977	Quartermaster..	Bright, Jesse	Greenbrier	$125 00
85,385	....do	Collier, Daniel, deceased, Elizabeth A. Collier, executrix.	Berkeley	64 00
85,159	.. do	Cadwallader, Catharine, deceased, John W. Vandiver, administrator.	Hampshire	200 00
89,305	....do	Currence, Eleanor, deceased, Squire B. Currence, administrator.	Randolph	288 00
90,975	....do	Callison, Charles B	Greenbrier	105 00
91,207	....do	Clay, Thomas G	....do	27 00
89,637	....do	Davis, Dr. F. M	Berkeley	135 00
87,413	....do	Doman, John, deceased, John E. Heatwole, administrator.	Hampshire	125 00
91,172	....do	Deal, James M., deceased, Richard L. Deal, administrator.	Fayette	403 00
85,547	do	Hilleary, John J	Jefferson	33 75
87,553	Quartermaster and commissary.	Heavner, E., deceased, Jacob W. Heavner, executor.	Upshur	47 00
90,583	Quartermaster..	Harmon, John C	Putnam	147 50
90,221	...do	Huddleston, Allen D	Fayette	9 60
91,435	... do	Hannah, John B	Pocahontas	141 00
85,695	....do	Jennings, James H	Berkeley	34 00
84,595	....do	Judy, Mary A., deceased, Martin Judy, administrator.	Hardy	60 00
90,769	....do	Judy, Amos, deceased, Henry Judy, executor	Pendleton	152 00
90,286	....do	Kirby, John E	Cabell	40 00
89,693	....do	Kenney, James	Fayette	100 00
90,280	....do	Light, Jacob F., deceased; S. O. Cunningham, administrator.	Berkeley	300 00
85,119	...do	Miller, William, deceased; William J. Moler, executor.	Jefferson	75 00
83,700	....do	Meanor, John, deceased; J. W. Meanor, Mary A. Hutzler, Martha J. Pine, and Sarah C. Lowry, heirs at law.	Berkeley	6 90
90,767	....do	McVey, Samuel P., deceased; Robert McVey, executor.	Greenbrier	560 00
91,096	....do	McComas (or M'comas), Thomas	Cabell	65 00
91,901	....do	Michael, George, deceased; Elizabeth Michael, administratrix.	Morgan	80 00

List of allowances made since January 14, 1886—Continued.

WEST VIRGINIA—Continued.

No.	Stores.	Claimant.	County.	Amount.
85, 791	Quartermaster..	Purgit, William	Hampshire ...	$65 00
89, 027	....do	Patterson, Paulina E	Greenbriar ...	140 00
90, 879	....do	Rece, James H	Cabell	175 00
84, 837	....do	Shirley, John G	Jefferson	631 50
85, 792	...do	Sharp, William R	Greenbriar ...	110 00
91, 410	....do	Shobe, Solomon	Grant	953 60
84, 896	...do	Thrush, Peter M	Hampshire ...	17 50
89, 617	....do	Thomas, W. A	Kanawha	7 50
91, 276	....do	Wilson, Charles	Fayette	44 50
91, 693	....do	Wilson, Zachariah L	Hampshire ...	315 00
84, 931	....do	Young, Hugh K., deceased; William W. Young, administrator.	Harrison	95 00
		Total		5, 878 35

MARYLAND.

85, 718	Quartermaster..	Brewer, George	Montgomery..	$472 50
86, 714	....do	Caliman, Thomas (colored), deceased; Meredith and Eliza A. Caliman, children.	Washington ..	16 80
35, 069	....do	Campbell, William H., deceased; Philemon M. Smith, jr., administrator.	Montgomery..	48 55
91, 431	....do.	Campbell, J. B. H., deceased; A. Hunter Boyd, administrator.	Alleghany	244 50
85, 466	....do	Dodge, John P	Montgomery	39 00
34, 549	....do	Duvall, Charles A., deceased; Emily F. Duvall, widow.	....do	14 00
30, 639	....do	Dixon, John A. J	Baltimore	9 00
91, 305	....do	Domer, Raleigh	Washington ..	62 00
91, 607	.. do	Dietz, Sydenham B	Montgomery	471 00
90, 581	....do	Ewing, Emeline M., deceased, Mary Ewing Replier and Bernard McCredy Ewing, heirs at law.	Frederick ...	10 00
88, 933	....do	Eyerly, Henry, deceased; Daniel H. Eyerly, in his own right, $412.50, and Daniel H. Eyerly, as surviving administrator, $557.34.	Washington ..	969 84
49, 230	....do	Fisher, Henry	Frederick. ..	24 81
90, 606	....do	Fulks, William R	Montgomery..	122 00
84, 947	....do	Heater, John, deceased, Richard Heater, executor.	Frederick	1, 851 00
85, 326	....do	Hixon, John	Washington ..	5 00
86, 055	... do	Higgins, Eric, deceased, Amanda Higgins, widow	Montgomery..	33 00
87, 647	....do	Houpt, William	Washington ..	236 74
88, 149	....do	Hemp, William A	Frederick	16 56
91, 219	....do	Hammersla James S	Washington ..	303 00
90, 922	....do	Hilterbrick, Peter	Carroll	54 00
86, 281	....do	James, Watkins	Washington ..	14 62
91, 955	....do	Jones, John A	Montgomery..	90 00
90, 210	....do	Keen, Timothy L	Baltimore ...	45 50
85, 061	...do	Miller, J. A	Frederick	16 00
85, 388	.. do	Mumma, Jacob	Washington ..	284 00
85, 761	....do	Murphy, Charles H., deceased, Mary E. Murphy, widow.	Montgomery..	15 00
88, 620	....do	Mehrling, George	Frederick	51 00
88, 733	....do	Maddox, C. J	Montgomery..	395 00
85, 062	...do	Neale, Henry A., deceased, Vivian H. Neale, administrator.	Charles	937 50
87, 945	....do	Norman, Richard C	....do	101 25
85, 937	...do	Phillips, John G.	Frederick ..	20 00
87, 783	....do	Perry, Richard H	Montgomery..	717 50
85, 213	...do	Ricketts, Henson	....do	442 50
85, 762	....do	Ronlette, William	Washington ..	4 00
90, 282	....do	Ringer, Isaiah	Baltimore. ...	3 75
90, 465	....do	Rohrer, Elias E	Washington ..	5 40
91, 306	....do	Rowland, Henry.	....do	50 00
84, 715	...do	Snyder, Solomon	....do	16 00
84, 895	...do	Stup, John J	Frederick	40 00
85, 651	...do	Shafer, Peter	....do	6 48
85, 652	....do	Spielman, Jonathan	Washington ..	64 87
85, 793	....do	Staubs, Jacob, Washington C. Snively, trustee..	...do	22 00
87, 368	....do	Sheppard, Thomas	Anne Arundel	160 00
35, 176	....do	Shadrick, Thomas M	St. Mary's ...	115 00
89, 175	...do	Stevens, Charles	Frederick	162 00
90, 711	..do	Smith, Robert, deceased, Rebecca Smith, widow.	Washington ..	24 00
90, 912	....do	Shifler, Otho J	...do	266 00
88, 686	....do	Tolson, Henry	Pr George's ..	600 00

List of allowances made since January 14, 1886—Continued.

MARYLAND—Continued.

No.	Stores.	Claimant.	County.	Amount.
34,876	Quartermaster..	Tolson, Mary H., deceased, Francis Tolson, administrator.	Pr. George's..	$174 50
76,267	....do	Thomas, David O., deceased, Margaret C. Myer and Laura W. Warfield, executrixes.	Frederick.....	294 00
31,757	....do	Wills, Charles H.....	Charles	95 00
87,603	... do	Weaver, Christian	Washington ..	45 00
34,547	....do	Wilson, O. S.....	Montgomery..	45 40
88,808	....do	Waters, Ulysses	Frederick.....	21 00
91,465	....do	Whister, Sophia.....	Washington ..	52 80
91,623	....do	Waltz, John, deceased, Ann M. C. Waltz, Martin Waltz, and Daniel Waltz, administrators.	....do	45 00
		Total	.....	10,445 37

INDIANA.

77,483	Quartermaster..	Bennett, Jeremiah G.....	Jefferson	$125 00
59,734	....do	Buxton, Charles F., deceased Edward M. Chambers, administrator.	... do	125 00
91,863	....do	Brewer, James.....	Washington ..	125 00
88,766	....do	Chance, Wilson W., deceased, William Duckworth, administrator.	Jackson	75 00
91,952	....do	Cline, George W.....	Scott	125 00
61,415	....do	English, Elisha G., deceased, William H. English, sole heir-at-law.	....do	200 00
91,864	... do	Gugel, George	Dearborn	130 00
91,954	... do	Green, John B	Washington ..	100 00
90,611	....do	Henthorn, James W. (insane), George W. Henthorn, guardian.	Ripley	125 00
91,019	... do	Martin, Greenberry.....	Washington ..	50 00
79,802	....do	Mackley, Henry, deceased, Jacob H. Russell, administrator.	Harrison	120 00
88,840	....do	Nicholas, Philip H, deceased, Ann Nicholas, administratrix.	Ripley	180 00
91,859	....do	Ratts, Francis M	Washington ..	75 00
89,769	... do	Thompson, William, sr., deceased, James H. Pryor, administrator.	Ripley	90 00
92,019	....do	Weir, James.	Washington ..	100 00
		Total	.....	1,745 00

PENNSYLVANIA.

84,988	Quartermaster..	Brown, Robert.....	Lycoming	$130 00
83,751	....do	Clark, James M., deceased, Rowland Austin, administrator.	Fulton.....	65 00
77,647	....do	Irvine, Robert, sr., deceased, John Irvine, surviving executor.	Cumberland ..	15 80
86,511	.. do	Patterson, George M	Adams	52 00
84,838	....do	Tawney, Abraham, deceased, John E. Tawney, executor.	....do	87 50
27,674	....do	Twaddell, L. H	Philadelphia..	105 50
92,031	....do	Young, G., deceased, estate of	York	135 00
		Total	.....	590 80

MISCELLANEOUS.

ILLINOIS.

87,474	Quartermaster..	Collins, William W	Warren.....	$135 00

DISTRICT OF COLUMBIA.

24,270	....do	Peter, Thomas, deceased, Elizabeth Peter, widow.	Washington ..	52 20
90,214	....do	Quinter, Thomas J	....do	24 94
89,791	....do	Shoemaker, David	....do	45 37
		Total	.....	257 51

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. Doc No. 81.

MILITARY ACADEMY CLERKS.

LETTER

FROM

THE SECRETARY OF WAR,

TRANSMITTING,

With inclosure, a letter from the Adjutant-General of the Army, in regard to services of clerks to disbursing officer and quartermaster, adjutant, and the treasurer at the Military Academy.

JANUARY 11, 1887.—Referred to the Committee on Military Affairs and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 6, 1887.

The Secretary of War has the honor to tramsmit to the House of Representatives, for the information of the Committee on Military Affairs, a letter of the 4th instant, and accompanying statement, from the Adjutant-General of the Army, in regard to services of the clerks to the disbursing officer and quartermaster, the adjutant, and the treasurer, respectively, at the Military Academy, provision for whose payment is contained in House bill 10395, making appropriations for the support of the Military Academy for the fiscal year ending June 30, 1888.

WM. C. ENDICOTT,
Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

WAR DEPARTMENT,
ADJUTANT-GENERAL'S OFFICE,
Washington, January 4, 1887.

SIR: I have the honor to submit the following statement, with view to its transmittal to the chairman of the Military Committee of the Senate and House of Representatives, respectively, for consideration, in connection with so much of a bill H. R. 10395 (Report No. 3491), "Making appropriations for the support of the Military Academy for the fiscal year ending June 30, 1888," as is included between lines 75 and 79 thereof.

I am, sir, very respectfully, your obedient servant,

R. C. DRUM,
Adjutant-General.

The SECRETARY OF WAR.

MEMORANDUM.

There has been a civilian clerk in the adjutant's office at West Point since 1826, and one has been regularly provided for in the Academy appropriation bill since the separation of such appropriation bill from the Army at large in 1834.

When the Military Academy bill for the fiscal year ending June 3, 1877, was under consideration, the House reduced the pay of the clerk to disbursing officer and quartermaster from $1,650 to $1,200, and the items for pay of clerk to adjutant and pay for clerk to treasurer, each $1,500, were omitted. When this bill reached the Senate the items for pay of clerk to adjutant and the treasurer were restored, but in conference committee were reduced to $1,200 each.

It seems that there was an impression amongst the committee in charge of the Military Academy bill at this time that these clerks were simply secretaries to the officers, one to the adjutant, the other to the treasurer.

Following this action in 1877, General Schofield stated in his report that the reduction of clerical salaries made last year in the usual appropriation for the Military Academy is a great injustice to very deserving men. These three clerks have been at the Academy for many years (one of them for over twenty-five years). They have charge of the records and accounts, and occupy positions fully equal in responsibility to those of the fourth class, $1,800 in the Departments here; while by the last bill, 1876, they were reduced to an equality with the lowest grade here, $1,200.

The clerk of the adjutant is required to keep all the records relating to the cadets, to make out rolls and returns, and to record the proceedings of the academic board, &c. In fact, the entire military and academic record of each cadet, upon which his graduation and future position in the Army depend, is kept by Mr. Ward (clerk to the adjutant). It is a position of great trust and responsibility, upon which he has been constantly employed since May, 1851; he is charged with the Academy records, as stated above, requiring accuracy and skill of the highest order, and for nearly thirty-six years has enjoyed the confidence of the various Superintendents and adjutants under whom he has served for his care and never-flagging attention to his work. His father, whom he succeeded in the office, instructed him in his duties with the idea of such succession. The pay of this faithful and deserving public servant should at least be made equal to that of a clerk of class four in the departmental service.

In this connection it is proper to remark that he is not a general-service clerk, but a civilian, whose services are invaluable on account of his devotion to duty and life-long experience in custody of the important records above referred to.

The treasurer's clerk has been provided for in the Academy appropriation bill since 1845, prior to which time there was a paymaster at the Academy. The duty of treasurer's clerk has been performed by a civilian clerk under paymaster and treasurer since 1818. He is the bookkeeper for cadets' accounts. An account is kept with each cadet, and his duties cover the preparation of returns and all other transactions that fall within the province of the treasurer, whose business relates to the affairs of the cadets.

The services of these clerks are, indeed, indispensable.

R. C. DRUM,
Adjutant-General.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 82.

UNITED STATES AND BRAZIL MAIL FACILITIES.

LETTER

FROM

THE POSTMASTER GENERAL,

With inclosure, in response to a resolution of the House calling for a report upon the value of the service of the United States and Brazil Mail Steamship Line for carrying United States mails.

JANUARY 11, 1887.—Referred to the Committee on the Post-Office and Post-Roads and ordered to be printed.

POST-OFFICE DEPARTMENT,
OFFICE OF THE POSTMASTER GENERAL,
Washington, D. C., January 10, 1887.

SIR: Pursuant to the act of Congress for making deficiency appropriations, approved August 4, 1886, in which it was provided that—

> The Postmaster-General is hereby directed to examine the claim of the United States and Brazil Mail Steamship Company for carrying the United States mails during the fiscal year ended June 30, 1886, and to report to Congress at its next session the amount of service so rendered and what sums, in justice and equity, he believed should be paid to said company for said service—

I have the honor to transmit herewith a communication to me by the president of the United States and Brazil Mail Steamship Company, dated December 28, 1886, succinctly stating the company's claim and the grounds maintained for its support.

And also a communication under date of December 14, 1886, by the Superintendent of Foreign Mails, and therewith accompanying two tabular statements, marked No. 1 and No. 2, showing, respectively, the first, the asserted weight, as claimed by the United States and Brazil Mail Steamship Company and its claim of the amount of sea and inland postage of the mails transported for the Department during the year in question; and, the second, the Superintendent's statement of the true weight of mails actually carried by the company, and the true amount which the rates of sea and inland postage entitle them to receive therefor; and attention is particularly invited to the communication of the Superintendent, as sufficiently demonstrating, without further explanation, that "the amount of service rendered" by said company during said year is correctly stated in Table No. 2.

And I also transmit a statement marked No. 3, prepared by the United States and Brazil Mail Steamship Company for the purpose, at

my request, showing the alleged expenses which the company claims were sustained in caring for, transporting, and landing United States mails in addition to what otherwise would have been imposed in the course of business, &c., together with the names and dates of sailings of its steamers.

And in connection with the claim of the company in regard to these special outlays, I transmit a report and a supplementary report, both under date of June 24, 1886, by T. M. Arrington, an inspector of this Department, detailed to examine, so far as was possible by making a round trip on one of the company's steamers, the claim that extraordinary expenses were so incurred.

It will be observed that in the company's statement one sailing is included which occurred after the fiscal year in question closed, leaving the correct number for the year thirteen instead of fourteen, as stated; but, more especially that the report of the inspector gives information inconsistent with acceptation of the entire claim that any such large outlay was occasioned by the fact merely that mails of the United States were carried or delivered, and indicating that the chief expenses incurred usually attended the business of the company and, for the most part, would not improbably have been sustained had the mails of the United States not have been so transported. The exceptions, indicated by the inspector, and the amounts, sufficiently appear by his report.

I also transmit, marked No. 4, a table showing the freight tariff of the United States and Brazil Mail Steamship Company, also furnished at my request for such a statement as should exhibit its rates for carrying "all the various articles, whether freight, express matter, or other sorts, transported" by the company during the year in question.

I also transmit, marked No. 5, a statement furnished by the company, at my request, of the amount received by the company from the Brazilian Government under its contract therewith. This statement, instead of showing the amount from June 30, 1885, to June 30, 1886, gives it from July 31, 1885, to July 31, 1886, it is presumed inadvertently. In this connection, I also transmit a communication to me by the Superintendent of Foreign Mails, under date of the 6th inst., inclosing translations of copies of the mail contracts furnished by the Brazilian Government to our minister.

The statements and reports herewith transmitted, as above mentioned, convey all the information of the facts supposed to be essential to enable an understanding of the claim of the company, and the amount of service rendered, which are in possession of the Department; except, perhaps, it should be added that I am informed by the company, and believe that the receipts from all sources of their business do not equal its cost.

Payment has been tendered by the Department at quarterly intervals to the company of the amount to which it is entitled under the law as the full sea and inland postage upon the mails so transported, but hitherto the company has regularly returned to the Department the warrants sent for the payment of this sum, because of its claim for a greater.

I further observe in respect to certain reasons affirmed by the company for their claim, as stated in the accompanying letter of the president, that:

As to the *third* and *fourth*, the statement of the superintendent shows that the full postage on mails transported has been tendered.

As to the *sixth*, the *rate* of compensation to the Atlantic steamship lines mentioned was *but sea postage only*, less than one-third of the rate

for letter mail tendered to the United States and Brazil Mail Steamship Company; and the greater sums earned arose from the far greater quantities transported.

I have hitherto, in the report upon the affairs of this Department to the President made in 1885, which has been laid before the Congress, stated the reasons why in my opinion vessels of the United States which, not being specially employed by the United States for the purpose, but sailing in the course of their own business as common carriers from our ports to ports of other countries, are sufficiently compensated for the service which they render in carrying such mails as the Department desires to place on board by the sea and inland postage; and except for the fact, there also stated, that this claimant carried the mails while others similarly situated refused, I am unable to distinguish any such substantial and practical difference between the circumstances of its service and those attending other American lines sailing to South American ports and upon the Pacific seas as to require me to report it as entitled to be excepted from the general rule, or to cause the greater rate of sea and inland postage to be inadequate compensation for the quantity of mails transported. Such other circumstances and reasons as are suggested in the letter of the president of the company, or arise upon the facts stated in this communication and accompanying papers, appear to be addressed to a different consideration and judgment than the measurement of compensation for transportation requires the exercise of, and to appeal entirely to Congress, because beyond the scope of postal service.

I have the honor to be, very respectfully, your obedient servant,

WM. F. VILAS,
Postmaster-General.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

[The United States and Brazil Mail Steamship Company. H. K. Thurber, president; C. P. Huntington, vice-president; H. F. Hitch, treasurer; J. M. Lachlan, manager; J. M. Lachlan, jr., secretary. Office of president, Mills building, corner Broad street and Exchange Place.]

NEW YORK, *December* 28, 1886.

SIR: I herewith respectfully submit to you the inclosed statements asked for by you and taken from the books of this company in support of our claims of $3,000 per voyage for conveying the United States mails to the following eight ports, namely: St. Thomas and connections to adjacent islands; Barbadoes and connections to the Windward Islands, Demerara and Trinidad; Pará, in the Empire of Brazil, and the Amazonian district; Maranham, Pernambuco, Bahia, Rio de Janeiro, and Santos, with connections to the Argentine Republic, Uruguay, and Paraguay.

We base our claim upon the following reasons:

First. That the expense for the services mentioned has cost this company, from June 30, 1885, to June 30, 1886, the sum of $29,193.64.

Second. That the mileage service rendered from June 30, 1885, to June 30, 1886, in fourteen round trips, has been 148,624 miles run.

Third. We think and believe that the Government has received in postage from mail matter (including registered mail) conveyed by our steamers from June 30, 1885, to to June 30, 1886, a sum nearly equal to the amount claimed by us as compensation for our services, namely, $3,000 per voyage.

Fourth. We have not received any compensation whatever for conveyance of the United States mails since June 30, 1885, although we have regularly conveyed the mails upon the requisition of the honorable Postmaster-General.

Fifth. We furnish to the Government facilities equal to any European line. A zinc-lined mail-room, specially built for the service; our pursers act as mail agents without any expense to the Government; our steamers are first-class American steamers, costing us from $360,000 to $390,000 each.

Sixth. That the United States Government has paid this present year to some foreign steamship lines a sum for conveyance of the mails to Europe that is a larger

mileage than we are asking from the Government (namely, $3,000 a trip) for the services we have rendered. These facts were obtained from information kindly furnished to this company upon application made to the Post-Office Department.

Seventh. That there is very little difference in cost to us whether we carry sixty or six hundred bags of mail matter.

Eighth. The companies paid said sum only run 2,778 nautical miles, while we run 5,308 nautical miles each outward trip.

Ninth. The foreign steamship companies referred to make delivery only at one port, while we make delivery at eight important ports.

Tenth. That coal costs European steamship companies about 33 per cent. of what our coal costs us in Brazil.

Eleventh. That the trade has been and is being increased by the services rendered by this company (the only one carrying the American flag to Brazil).

For the above reasons we ask from the United States Government the simple justice of paying us $3,000 a voyage for conveyance of the United States mails in Brazil to the above-named ports.

The expenses of running our steamers frequently run up to $40,000 for the round trip of about 10,616 miles.

With much respect, I remain, very truly, yours,

H. K. THURBER,
President of the United States and Brazil Mail Steamship Company.

Hon. WILLIAM F. VILAS,
Postmaster-General.

POST-OFFICE DEPARTMENT,
OFFICE OF FOREIGN MAILS,
Washington, D. C., December 14, 1886.

SIR: I have the honor to return herewith the two sets of statements that you referred to me for investigation and report, which have been submitted by the United States and Brazil Mail Steamship Company, and purport to show the weights (gross and net) of the mails dispatched from this country to Brazil by each steamer of said company sailing during the period from June 30, 1885, to December 1, 1886, the amount allowed to said company for their conveyance, and the amount estimated to have been paid as postage on the articles contained in said mails.

No "summary" or "recapitulation" of the various statements referred to accompanied them; but as each separate statement contains the same items with regard to the mails dispatched by each vessel, respectively, I shall in this report analyze only the first statement submitted—that with reference to the mails dispatched per the steamer Finance, on the 7th of July, 1885.

This statement claims that the mails dispatched by said steamer consisted of 31 bags of ordinary mail and 2 bags of registered articles, weighing gross 1,844 pounds, and net 1,780½ pounds, as weighed by the agent of the company at Newport News, Va., of which 1,530 pounds were papers and 312½ pounds were letters (estimated in the proportion of 1 pound of letters to 11½ pounds of papers), and that this Department received as postage upon the letters contained in these mails, upon the basis of

three letters to the ounce	$750 00
Upon the papers, at the rate of 1 cent per 2 ounces	120 40
And as registration fees on 166⅔ pounds of registered matter, estimated as composed of three letters to the ounce (7,992 letters)	799 20
Total	1,669 60

The actual net weights of the mails in question, as ascertained by the postmasters at New York and Baltimore (who made up the mails), before the articles were placed in the bags and reported to this Department, were, letters and post cards, 65,612 grams, not quite 145 pounds; other articles, 690,487 grams, about 1,522½ pounds, which weights include the 72 registered articles contained in said mails of the aggregate net weight of 5,660 grams, or about 12½ pounds. And the United States and Brazil Mail Steamship Company were allowed the whole amount estimated to have been received as postage upon this matter, viz, 5 cents per ½ ounce=$1.60 per pound, for letters and post cards, and 1 cent per 2 ounces=8 cents per pound, on all other articles, whether registered or not registered, amounting for letters and post cards to $232; for other articles, $121.80; or in all to $353.80.

It is altogether impracticable (even if it were desirable) to keep an account of the value of every postage-stamp attached to mail matter addressed to foreign countries, consequently the amount of postage actually prepaid on such matter cannot be accurately stated. But it is assumed that in the case of matter addressed to Brazil and to

other countries of the Postal Union, for which the postage rates are 5 cents per ½ ounce or fraction for letters, 2 cents each for post cards, and 1 cent per 2 ounces or fraction for other articles, the rates of $1.60 per pound for letters and post cards, and 8 cents per pound for other articles, represent the whole amount received for postage—if it does not in fact exceed it—for the following reasons:

While it is true that many letters do not weigh as much as one-half ounce, and therefore that upon *fully prepaid* letters the Department probably receives more postage than $1.60 a pound thereon, it is equally true that under the provisions of the Postal Union Convention, which make the prepaying of postage optional with senders, and allows official postal correspondence to pass free of postage, many letters contained in said mails are not only not *fully* prepaid, but have no postage-stamps whatever attached to them; and that as other articles are required to be forwarded when only *partially* prepaid, many *short-paid* articles other than letters are likewise contained in said mails. In addition, all matter received in "open mail" from foreign countries is required to be included in the United States mails for the countries of its destination, consequently its weight is included in the reported weights of the United States mails, and the steamers receive the same rates ($1.60 and 8 cents per pound respectively) for its conveyance, notwithstanding this Department does not collect more than $1.052 per pound (12 francs per kilogram) for the *letters* so transported to Brazil from the countries of origin of said matter.

So that while the United States and Brazil Mail Steamship Company is allowed by this Department the full sea and inland postage on the total net weight of all the articles contained in the United States mails conveyed by it to Brazil, there is a considerable number of articles in said mails upon which no postage whatever has been received by this Department, and a still further number for the conveyance of which this Department pays 54.8 cents per pound more than it receives, which items will, in my opinion, more than counterbalance any advantage which may possibly accrue to this Department by reason of letters weighing less than one full half-ounce, and place it beyond reasonable doubt that the rates allowed for said service are in fact more than the full "sea and inland postage" on the mails conveyed.

I have not taken into consideration in this statement the amount paid as registration fees on the registered articles contained in these mails, for the reason that said fees form no part of the "postage"; but if such fees should be considered as "postage," then the amount to be allowed should be increased by $7.20 (10 cents each for 72 articles) and the total to $361 instead of $1,669.60, as claimed by the company.

Relative to the correctness of the weights of the mails as reported by the despatching postmasters, I have to say that having personally inspected the making up of the mails despatched from New York per the steamer Advance on the 17th of August last, and accompanied said mails to Newport News, I have reason to know that the greatest care is taken to ascertain and report the weights correctly. Moreover, there is no apparent reason to suspect that the sworn officers of the Government do not perform their duties faithfully in this respect.

I inclose herewith two statements which I have caused to be prepared in order that the above mentioned statements of the United States and Brazil Mail Steamship Company may be readily compared with the actual facts in the case as shown by the records of this office.

No. 1 shows that the company claims to have transported during the fiscal year ended June 30, 1886, 2,997 pounds of letters, 2,346½ pounds of registered articles, and 31,3[illegible]8 pounds of papers; in all, 36,701½ pounds, including 112,652 registered articles, the postage (including registration fees, and allowing three letters to the ounce) upon which, it is claimed, amounted to $26,585.44.

No. 2 shows that the company actually transported during the fiscal year ended June 30, 1886, 2,550 pounds of letters and post cards, and 31,360 pounds of other articles (including registered matter), in all 33,910 pounds; for which it has been allowed $6,592.24, as the full sea and inland postage, calculated at the rates of 10 cents per ounce for letters and post cards, and 1 cent for each 2 ounces of other articles; and that if 15 cents per ounce (three letters to the ounce), and the registration fees on the 1,988 registered articles contained in the mails, had been allowed, the allowance to the company would have amounted only to the sum of $8,862.97 instead of $26,585.44, as claimed by said company.

I also transmit, herewith, copies of two reports made by Post-Office Inspector T. M. Arrington, who was detailed to make an investigation of the mail service rendered by the United States and Brazil Mail Steamship Company, and for that purpose proceeded to Rio de Janeiro, on the steamer Finance, which sailed from Newport News on the 27th of April last, in which you will find a detailed report of said service.

I am, very respectfully, your obedient servant,

NICHOLAS M. BELL,
Superintendent of Foreign Mails.

The POSTMASTER-GENERAL,
Washington, D. C.

No. 1.—*Statement of the United States and Brazil Mail Steamship Company, showing the number of bags of mail; the net weight of the mails (in pounds) conveyed to Brazil, &c., by the steamers of said company; the estimated sea and inland postage, at the rate of 3 letters (at 5 cents) to the ounce and of cent per ounce of papers; the amount of registration fees (at 10 cents), and the number of registered articles.*

No.	Date.	Steamer.	No. of bags.	Net weight of mails (in pounds.)				Sea and inland postage and registration fees.					Number of registered articles.
				Letters.	Registered articles.	Papers.	Total.	Letters: 3 letters (at 5 cents) to an ounce.	Papers: 1 cent per 2 ounces.	Registered letters: 3 letters (at 5 cents) to an ounce.	Registration fees: 10 cents per letter.	Total.	
	1885.												
1	July 7	Finance	33	146	166½	1,530	1,842½	$350 40	$120 40	$399 60	$799 20	$1,669 60	7,992
2	Aug. 21	Merrimack	38	132	110	1,383	1,625	316 50	100 64	264 00	528 00	1,209 14	5,280
3	Aug. 31	Advance	52	183	194¾	1,925	2,302¾	439 20	154 00	467 40	934 80	1,995 40	9,348
4	Sept. 19	Finance	59	272	138¼	2,853	3,263¼	652 80	224 24	331 80	663 60	1,872 44	6,636
5	Oct. 28	Merrimack	71	383	159¼	4,016	4,558¼	919 20	321 28	382 20	764 40	2,387 08	7,644
6	Nov. 10	Advance	41	138	218½	1,846	1,702½	331 20	115 68	524 40	1,048 80	2,020 08	10,488
7	Dec. 5	Finance	50	136	251½	1,429	1,816½	326 40	114 32	603 60	1,207 20	2,251 52	12,072
	1886.												
8	Jan. 17	Advance	54	177	162½	1,858	2,197½	424 80	148 64	390 00	780 00	1,743 44	7,800
9	Feb. 20	Finance	69	288	191½	3,026	3,505¼	691 20	242 08	459 00	918 00	2,310 28	9,180
10	Mar. 27	Advance	72	284	275	2,981	3,540	681 60	238 48	660 00	1,320 00	2,900 08	13,200
11	Apr. 27	Finance	60	232	160½	2,437	2,829½	554 30	194 96	385 20	770 40	1,904 86	7,704
12	May 15	Colorado	71	305	147	3,202	3,654	732 00	256 16	352 80	705 60	2,046 56	7,056
13	June 8	Advance	73	321	171½	3,372	3,864½	770 40	269 76	411 60	823 20	2,274 96	8,232
		Totals	743	2,997	2,346½	31,358	36,701½	7,190 00	2,500 64	5,631 60	11,263 20	26,585 44	112,632

No. 2.—*Statement showing the weight of mails (in pounds) conveyed to Brazil, &c., by the steamers of the United States and Brazil Mail Steamship Company during the fiscal year ended June 30, 1886, as reported to the Post-Office Department; the amount paid for the same, at the rate of $1.60 per pound of letters and postal cards and 8 cents per pound of other articles; the estimated sea and inland postage, at the rate of 3 letters (at 5 cents) to the ounce and of 1 cent per 2 ounces of other articles; the number of registered articles contained in these mails, and the amount of registration fees on the same.*

No.	Date.	Steamer.	Number of bags.	Weight of mails (in pounds).				Sea and inland postage and registration fees.					Number of registered articles.	Amount actually paid.		
				Letters and postal cards.	Registered articles.	Other articles.	Total.	Letters and post cards: 3 letters (at 5 cents) to an ounce.	Other articles: 1 cent per 2 ounces.	Registered letters: 3 letters (at 5 cents) to an ounce.	Registration fees: 10 cents per letter.	Total.		Letters and post cards: $1.60 per pound.	Other articles: 8 cents per pound.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	1885.															
1	July 7	Finance ...	Not reported.	144+	Included in columns 5 and 7.	1,522+	1,666+	$348 00	$121 86	Included in columns 9 and 10.	$7 20	$477 06	72	$230 89	$121 86	$352 75
2	Aug. 21	Merrimack.		176+		1,485+	1,661+	422 40	118 80		24 20	565 40	242	281 60	118 80	400 40
3	Aug. 31	Advance ..		151+		1,895+	2,046+	362 40	151 60		6 80	520 80	68	241 60	151 60	393 20
4	Sept. 19	Finance ...		207+		3,041+	3,248+	494 10	243 28		10 50	747 88	105	331 20	243 18	574 48
5	Oct. 28	Merrimack.		260+		3,592+	3,852+	624 90	287 63		16 30	928 83	163	416 32	287 52	703 84
6	Nov. 10	Advance ..		171+		1,517+	1,688+	410 40	121 36		16 30	548 06	163	273 60	121 25	394 85
7	Dec. 5	Finance ...		178+		1,450+	1,628+	427 20	116 00		8 30	551 50	83	285 60	116 00	400 80
	1886.															
8	Jan. 17	Advance...		224+		1,657+	1,881+	537 60	132 56		27 20	697 36	272	358 20	132 57	490 77
9	Feb. 20	Finance ...		240+		2,932+	3,173+	578 40	234 56		11 40	824 36	114	385 30	234 56	619 86
10	Mar. 27	Advance...		204+		3,132+	3,336+	489 60	258 56		20 80	768 96	208	326 26	250 56	576 82
11	Apr. 27	Finance ...		198+		2,475+	2,673+	475 20	219 60		16 90	711 70	169	316 40	198 00	514 40
12	May 15	Colorado ..		184+		3,275+	3,441+	441 60	260 56		16 50	718 66	165	294 20	260 57	554 77
13	June 8	Advance...		213+		3,405+	3,618+	513 60	272 40		16 40	802 40	164	342 20	272 40	614 60
		Totals ..	.....	2,550+	.....	31,360+	33,910+	6,125 40	2,538 77	.....	198 80	8,862 97	1,988	4,083 37	2,508 87	6,592 24

No. 3.—*Statement of the expenses this company was and is actually put to for caring for, transporting, and landing United States mails in addition to what otherwise would have been imposed in the course of its business, together with the cost of our properly equipped mail-rooms, used solely for mails and for no other purpose.*

Ports.	Per voyage.	Number of voyages.	Amount.
At Newport News, Va	$177 64	14	$2,486 96
At St. Thomas, D. W. I	12 00	14	168 00
At Barbadoes, B. W. I	6 00	14	84 00
At Pará, Brazil	44 00	14	616 00
At Maranham, Brazil	1,411 34	14	19,758 76
At Pernambuco, Brazil	30 80	14	431 20
At Bahia, Brazil	28 80	14	403 20
At Rio de Janeiro, Brazil	64 58	14	904 12
At New York, U. S. A	8 50	14	119 00
Use of mail-room, 520 cubic feet capacity	301 60	14	4,222 40
Per voyage	2,085 26	14	29,193 64

Names and dates of sailing of steamers of this line for the year ending July, 1886.

No.	Steamship.	Date of sailing.	No.	Steamship.	Date of sailing.
1	Finance	July 7, 1885	8	Advance	Jan. 17, 1886
2	Merrimack	Aug. 21, 1885	9	Finance	Feb. 20, 1886
3	Advance	Aug. 31, 1885	10	Advance	Mar. 27, 1886
4	Finance	Sept. 19, 1885	11	Finance	Apr. 27, 1886
5	Merrimack	Oct. 28, 1885	12	Colorado	May 15, 1886
6	Advance	Nov. 10, 1885	13	Advance	June 8, 1886
7	Finance	Dec. 5, 1885	14	Finance	July 3, 1886

OFFICE OF POST-OFFICE INSPECTOR,
POST-OFFICE DEPARTMENT,
Washington, D. C., June 24, 1886.

DEAR SIR: I herewith return to you foreign case No. 71,754, Brazil, received from your office under date of April 24, 1886, and upon which I beg leave to make the following report:

Leaving Washington at 4.35 a. m. April 26, I arrived at Newport News, Va., at 11.15 a. m. April 27. I at once went on board the Finance, a steamship of the United States and Brazil Mail Steamship Company, of New York. She was under the command of Capt. E. C. Baker.

The mail from New York arrived by the Chesapeake and Ohio Railroad at 5.50 a. m., and was at once delivered to the agents of the steamship Finance, at pier No. 2, within 100 yards of the steamer. There it was taken on trucks and carried to the gang-plank of the steamer, then carried on board by some of the employés, and was deposited in the mail-rooms at 6.30 p. m.

The mail for the steamer from the Newport News post-office was delivered at 7.30 p. m. The postmaster informed me that his mail could not be closed until he assorted the mail that arrived at 5.50 p. m., as he had to get his foreign mail out of that, and he delivered it as soon as this could be done.

There were delivered to the steamer 60 bags of mail, for the following ports, to wit: For St. Thomas, 4; for Barbadoes, 5; for Pará, 4; for Maranham, 4; for Pernambuco, 5; for Bahia, 4; and for Rio de Janeiro, 34.

On this steamer there are two mail-rooms, one for the registered mail and one for the ordinary mail. The room for the registered mail is situated upon the upper deck and opens directly in the purser's room. This room is 7 feet and 3 inches long, 6 feet and 2 inches wide, and 7 feet and 1 inch high. It is lined with sheet iron and locked with two locks.

The room for the ordinary mail is situated on the main deck, about the center of the steamer; it is 8 feet long, 8 feet and 7 inches wide, and 7 feet and 7 inches high. This, as the room for the registered mail, is lined with iron and locked with two locks. Both rooms are ventilated by means of windows, secured by iron wire, forming meshes. Both are very secure and are very well situated, being easy of access in case of fire or accident. Nothing is permitted in these rooms except the mail. The keys are in the possession of W. W. Campbell, the purser, and are kept locked up in the safe belonging to the steamer. No one is permitted to go in these rooms except the purser, W. W. Campbell, and John H. Campbell, who is the freight clerk.

The only way by which the cost can be told of transporting the mail from the rail-

road to the steamer is by estimating the time, as the work was done entire by the employed men of the steamer.

The steamer did not wait below the "middle ground," sailing direct from pier No. 2 at 7.45 p. m., just one hour and fifteen minutes after the mail arriving from New York was delivered and fifteen minutes after the delivery of the mail from Newport News.

Capt. E. C. Baker and Purser W. W. Campbell both informed me that the steamer was loaded and ready to sail at 4 a. m. on the 27th, and had it not been for the mail would have left at that time; so it will be seen they claim they were waiting for the mail at Newport News fifteen hours and forty-five minutes; still their advertised time for leaving is at 7 p. m., only forty-five minutes sooner than the steamer sailed.

We arrived at St. Thomas, West Indies, on Sunday, May 2, at 7.10 p. m. A pilot came on board and took the steamer near the wharf. At 7.25 p. m. W. W. Campbell, the purser, Kirk Byrant, one of the quartermasters of the steamer, and myself, left the steamer in a row-boat with the mail. This boat was rowed by four men, landing Mr. Campbell, Mr. Byrant, and a negro carried the mail to the post-office, reaching there and delivering the mail to the assistant postmaster at 8.03 p. m., 38 minutes after leaving the steamer. The post-office was only a short walk from the place the row-boat landed us; not more than 200 yards. Nothing was carried in this boat with the mail.

All the expenses of landing freights, mails, and everything else are paid by the agents of the steamship company at St. Thomas; then the bills are sent direct to the office of the company in New York. None of the bills or expenses are paid by the officers in charge of the steamer.

The cost for delivering our mail, I was informed, was about $6.

The steamer sailed from St. Thomas at 9 a. m. May 3.

While at St. Thomas, I learned there is a regular line of French steamers, carrying the mail, running from St. Thomas to Havana, leaving St. Thomas regularly once a month, between the 3d and 5th; returning from Havana, arriving at St. Thomas on the 25th or 26th of each month.

The "Hamburg-American Line" carries mail from St. Thomas to La Guayra twice each month; leaving from the 9th to the 11th and from the 23d to the 25th of each month; returning, arrives about the same dates. This is a German line of steamers.

The "Royal Mail," an English line of steamships, carrying the mail, leaves St. Thomas every second Thursday, taking mail for the Windward Islands, for Barbadoes, for Europe, for Jamaica, for the Republic of Ecuador, for Peru, for Chili, and for Bolivia; returning, arrives at St. Thomas every second Saturday.

We arrived at Barbadoes, Windward Islands, at 5.30 a. m. on May 5. At 5.55 a. m. the doctor representing the board of health came on the steamer. At 6.05 a. m. W. W. Campbell, the purser, Kirk Byrant, one of the quartermasters, and myself, left the steamer in a row-boat rowed by four men, with the mail. We landed with the mail at 6.25 a. m. There it was taken in a cart and carried to the post-office, arriving there and delivering the mail at 6.40 a. m. The steamer anchored about 1 mile from the dock, and from the dock to the post-office is about one-half mile. Here, as at St. Thomas, all expenses are paid by the local agents; the cost of delivering the mail is about $6. The steamer delivered no freight at this port, only the mail and some passengers; nothing was carried in the boat with the mail.

The steamer sailed from Barbadoes at 8.40 a. m., May 5.

While at Barbadoes I learned from the postmaster that the mail leaves every Monday, on English freight boats via Trinidad, for Venezuela; also every four weeks by the Royal Mail.

Mail for the Windward Islands leaves Barbadoes by the Royal Mail once every two weeks.

On the morning of May 10, at the mouth of the Para River, the steamer took on board a pilot some 70 miles from the city of Para.

We arrived at Para, Brazil, at 3.40 p. m. on May 10. At 4.10 p. m. the customs officials and the doctor representing the board of health came on board the steamer. At 4.25 p. m. W. W. Campbell, the purser, Kirk Byrant, one of the quartermasters, and myself, left the steamer with the mail in a steam-launch. In this launch were the customs officials, the doctor, and several passengers. Before landing, the launch carried the customs officials and the doctor to make a call at a sailing vessel that had anchored about the time we did. We landed with the mail at the wharf at 5.10 p. m. The mail was then taken on a truck and carried about 300 yards to the post-office, where it was delivered at 5.20 p. m. From what I could learn it cost to deliver the mail from the steamer to the post-office about 40 milreis. This is not a tidal harbor. The steamer anchored about one-half of a mile from the wharf.

The freight is delivered in lighters, for the use of which the company usually pay about 50 milreis a day; these lighters are loaded and taken to the custom-house, there to remain till the duty can be levied and collected before they can be unloaded, the company paying for their use all the time.

There was considerable freight for this port, and the steamer did not sail till 3 a. m. May 12.

Upon nearing the city of Maranham, on May 13, the pilot came on board the steamer at 1 p. m. This being a tidal harbor, at 1.30 p. m. the steamer anchored to wait till the tide was high enough to admit of the steamer passing over the "bar." At 2.50 p. m. the anchor was raised and the steamer crossed the "bar" and anchored in the harbor at 3.15 p. m. At 3.25 p. m. the customs officials and the doctor representing the board of health came on the steamer. At 3.50 p. m. W. W. Campbell, the purser, George Everlyn, one of the quartermasters, and myself, left the steamer with the mail in a steam-launch, nothing being carried with the mail. We arrived at the dock at 4.10 p. m.; the mail was there taken by two negro men and carried to the post-office, reaching there and delivering it at 4.20 p. m. The steamer anchored about one-third of a mile from the dock, and from the dock to the post-office is about one-fourth of a mile.

Desiring to make special efforts to get the exact cost of delivering the mail at this port, I requested Mr. W. W. Campbell, the purser, to obtain this information for me. I addressed him a note in the following language: "Please learn for me the exact cost of delivering the mail at Maranham." He requested the agent of the company to give him this information for me, giving him my note. This the agent promised to do; but as we were leaving he informed Mr. Campbell that he had been too busy to make the calculation, but would have it for me on my return trip. On our return trip I received the following, in answer to my inquiry, from the agent: "From 25 to 50 milreis, according as we use the tug-boat." I saw the agent and tried to learn the cost of delivering the mail on our last trip, but could get nothing more definite than his note.

The cost of delivering the freight is about the same as at Para, it being delivered in exactly the same way in lighters.

The only delay at this port was caused by the low tide, which was one hour and twenty minutes; none on account of having the mail on board.

The steamer sailed at 2.45 a. m., May 14.

On May 17, at 9.12 a. m., the steamer anchored about 3 miles from the city of Pernambuco, Brazil, and waited for the pilot, who came on board at 9.19 a. m.; at 9.30 a. m. the pilot took the steamer in about 1 mile of the city and anchored at 9.40 a. m. At 9.30 a. m. W. W. Campbell, the purser; Kirk Byrant, one of the quartermasters, and myself, left the steamer in a row-boat, with the mail, the boat being rowed by six men; we went directly to the custom-house boat, near the dock, arriving there at 10.20 a.m.; there the mail was receipted for and taken in charge by the custom-house officer, and by him delivered to the post-office; we had to remain at this boat till the doctor representing the board of health came, which was at 10.40 a. m. We left this boat at 10.45 a. m. and landed at the wharf at 10.50 a. m. From the wharf to the post-office is about 300 yards.

The agent of the company at this port told me that when the mail was taken from the steamer so far as it was this time that it cost him to deliver it to the post-office about 45 milreis. The mail had to be delivered to the custom-house officer, for the reason that we were not allowed to land until the custom officials and the doctor examined the ship's papers as to health, &c., and neither would visit the steamer till she was anchored in the harbor, and she could not then come in on account of the tide. This was done to save time and have the mail delivered as soon as possible.

This is a tidal harbor, and the steamer waited for high tide till 2.50 p. m., when she raised her anchor and came in the harbor, anchoring at 3.30 p. m. The steamer sailed from Pernambuco at 4 p. m. May 18.

Besides the United States and Brazil Mail Steamship Company, there are three regular lines of steamers, carrying the mail from Pernambuco to Rio de Janeiro, to wit: The Royal Mail and the Pacific Line, two English lines, and the Brazilian Line, each leaving once a month, and at intervals of about ten days. The mail is also sent by steamers known as "tramps," but with no regularity.

The steamer anchored in the port of Bahia at 7.40 a. m. May 20. At 7.50 a. m. the custom officials and the doctor representing the board of health came on the steamer.

The steamer took no pilot at this port. At 8.45 a. m. W. W. Campbell, the purser, George Everlyn, one of the quartermasters, and myself left the steamer with the mail in a row-boat, rowed by four men. We landed at the dock at 9.05 a. m. There the mail was taken by four men and carried to the post-office, where it was delivered at 9.10 a. m. The agent at this port told me that it cost to deliver our mail to the post-office and to take the mail from the post-office to the steamer 60 milreis, or 30 milreis each. The freight is delivered in lighters that cost 40 milreis a day.

The steamer anchored about 1 mile from the dock, and from the dock to the post-office is about 200 yards. The steamer sailed from Bahia at 10 p. m. on May 20.

We arrived at Rio de Janeiro, Brazil, the port of destination, on Sunday, May 23, at 2.30 p. m.

At 2.45 p. m. the custom officials and the doctor representing the board of health came on the steamer.

At 3 p. m. W. W. Campbell, the purser, George Everlyn, one of the quartermasters, and myself left the steamer in a steam-launch with the mail, arriving at the dock at 3.20 p. m. The mail was then put in two carts and taken to the post-office, and was

delivered at 3.50 p. m. The steamer anchored about 1 mile from the dock, and from the dock to the post-office is about 300 yards.

The cost of delivering the mail from the steamer to the post-office is about 45 milreis. The agent of the company hires the launch to make the necessary trips to and from the steamer while she is in port, paying so much for the time. The trip carrying our mail from the steamer to the dock is about 30 milreis; then for the two carts and delivering the mail is 15 milreis, making 45 milreis.

The lighters here for delivering the freight cost 27 milreis a day. All of the freight is delivered in the same way. A milreis is worth 44 cents.

On the morning of May 24, the day after our arrival, I called upon Hon. Thomas J. Jarvis, the United States minister for Brazil, and requested him, according to my instructions, to obtain for me a copy of the contract between the Brazilian Government and the United States and Brazil Mail Steamship Company for carrying the mail, and for such other information as my instructions called for, giving him a copy of that part of my instructions. He prepared a letter, addressed to the minister and secretary of foreign affairs of the Brazilian Government, asking for the information desired. This letter he took in person to the office of the minister, and there learned from the assistant, who was then acting as minister, that the minister was sick; then Mr. Jarvis requested him, giving him the letter, to get the desired information, and urged upon him the necessity of having it ready for me by the 28th, as my steamer left on the 29th. He promised to do so, but this he failed to do, and I was compelled to leave without it. I left directions with Mr. Jarvis that as soon as he received these papers to forward them at once to you, which he promised to do.

I learned from the director-general of the post-office that the mail leaves Rio de Janeiro for Uruguay and the Argentine Republic nearly every day, certainly as often as twenty times each month, by English, French, and German steamers, and that the mails from the United States arriving at Rio de Janeiro for these countries are dispatched by the first steamer leaving after the mail arrives. The mail from the United States for Rio de Janeiro, for Uruguay, and for the Argentine Republic, if carried by the Red Cross Line, is taken to Pernambuco, one of the northern ports of Brazil, and from there is taken by one of the steamers running to Rio de Janeiro. These steamers, it will be seen from this report, run regularly four times each month, to wit: The Royal Mail, the Pacific Line, the Brazilian Line, and the United States and Brazil Mail Steamship Company; then the mail for Uruguay and for the Argentine Republic is dispatched from Rio de Janeiro, as stated, by steamers leaving nearly every day.

At none of the ports of call is there any duty paid on account of having the mail on board the steamer, neither is there any commissions paid for the mails. The price paid the pilots at the ports where pilots were necessary has no connection whatever with the mails, for the reason that the steamer, if it called at these ports, would have to take the pilots, consequently the piloting can in no way be properly charged to carrying the mail.

The steamer did not call at the ports of Maceio and Santos.

The reason why it was so very difficult to get at the exact cost of delivering the mails at the different ports is this—the mails as you will see were delivered sometimes in row-boats and sometimes in steam launches. These boats and launches are hired by the local agents at the different ports to be used by them while the steamer is in port to make for them as many trips as may be necessary, paying so much for the time, and then it is the custom to charge this amount to the company in gross. I am sure the prices given by me are as near correct as can be given, unless it should be known before hand that this was wanted, and then have this service performed with the view of getting the exact figures.

In conclusion I will say that these mails are securely kept and are despatched with much care and safety.

Very respectfully, your obedient servant,

T. M. ARRINGTON,
Post-Office Inspector.

Hon. NICHOLAS M. BELL,
Superintendent of Foreign Mails, Washington, D. C.

OFFICE OF POST-OFFICE INSPECTOR,
POST-OFFICE DEPARTMENT,
Washington, D. C., June 24, 1886.

DEAR SIR: I return to you the statement prepared by Mr. J. M. Lachlan, the general manager of the United States and Brazil Mail Steamship Company, showing the cost of handling the United States mails between Newport News, Va., and Rio de Janeiro, Brazil; showing the cost of handling and delivering the mail at the different ports of call. At Newport News, Va., Mr. Lachlan shows his cost to be as follows:

Use of engine and flat-car to transfer mails from Pier No. 2 to No. 1.....	$5 00
Use of tug-boat in winter, say five months, at $20, $100; or average per trip.	8 00

This service while ships are waiting for mails below the middle ground. Steamers are invariably detained at this point awaiting mails, say, seven hours, at $23.52 per hour	$164 64
Total at Newport News	177 64

It will be seen by my report, made to you in Case No. 71,754, Brazil, under date of June 24, 1886, that the facts and manner of delivering the mail at this point were these, to the steamer Finance, leaving Newport News on April 27, 1886; the mail was delivered to the agents of the steamer at Pier No. 2, and not at No. 1, by the railroad company, so that there was no cost for an engine or flat-car.

The steamer sailed direct from Pier No. 2 and did not wait below the middle ground, so that there was no cost for a tug-boat.

As to the steamer being detained for the mail the facts are these: The advertised time for leaving of the steamer is at 7 p. m. All the mail was delivered and on board at 7.30 p. m., and she sailed at 7.45 p. m. The officers of the steamer stated to me that they were waiting for the mail from 4 a. m. till the time of sailing—7.45 p. m.—fifteen hours and forty-five minutes. The mail arrived from New York at 5.50 p. m. The train that brought this mail also brought some passengers for the steamer, so that in reality the steamer was waiting, or, rather, delayed on account of the mail just forty-five minutes.

At St. Thomas, D. W. I., Mr. Lachlan shows the cost of delivering the mail to be as follows:

Boat hire	$10 00
Porterage	2 00
Total	12 00

The mails here were delivered in a row-boat, then taken by two of the officers of the steamer and a negro and carried to the post-office. Upon inquiry, I learned that it cost for delivering the mail from the steamer to the post-office, including boat hire and porterage, $6.

At Barbadoes, Br. W. I., Mr. Lachlan shows the cost to be as follows:

Boat hire	$4 00
Porterage	2 00
Total	6 00

This, from what I could learn, is about what it did cost to deliver the mail at this port.

At Pará, Brazil, Mr. Lachlan shows the cost to be as follows:

Steam launch	$16 00
Purser and one man in charge of the mails	16 00
Porterage	12 00
Total	44 00

My report shows the cost to be as follows, from what I could learn, to deliver the mail from the steamer to the post-office—about $17.60; this includes the steam launch and the porterage. The purser and one of the quartermasters of the steamer delivered the mail, leaving the steamer at 4.25 p. m., and delivering the mail at the post-office at 5.20 p. m., so that the time consumed by them was 55 minutes.

At Maranhão, Brazil, Mr. Lachlan shows the following charges to the mail:

Pilotage	$176 00
Custom-house duties and petties	59 64
Light dues	40 08
Lighter and tarpaulin	28 80
Landing mails	8 00
Translating manifest	16 00
Custom-house agents	20 00
Porterage	12 00
Bill of health	1 76
Telegrams	4 00
Commissions	80 00
Detention seventy-two hours, at $23.52½ per hour	1,693 50
Making a total of	2,131 78
This amount is credited by freight list	720 44
Leaving the amount charged to the mail of	1,411 34

My report shows that the agent of the steamship company at this port informed me that it cost to deliver the mail from the steamer to the post-office from $11 to $22; the cost varying as they use a row-boat or steam-launch, this time a steam-launch was used and the cost was about $22. The agent told me that this was as much as the delivery of the mail cost at this port.

As to the charges made for pilotage, custom duties, light dues, lighter and tarpaulin, translating manifest, bill of health, telegrams, and for commissions, have no connection whatever with the mails; these charges would be the same if the steamer had no mail.

As to the detention of the steamer 72 hours, the facts are these: This is a tidal harbor; at 1.30 p. m., on May 13th, the steamer anchored to wait till the tide was high enough for her to go in the harbor; at 2.50 p. m. the steamer went in the harbor, anchoring at 3.15 p. m. The steamer sailed from this port at 2.45 a. m. May 14, so that it will be seen that from the time the steamer anchored near the city of Maranhão, to wait for high tide, till the time she sailed was just 13 hours and 15 minutes; the only delay was caused from low tide, which was 1 hour and 20 minutes. The time the steamer remained in port was consumed with the cargo, unloading the freight.

At Pernambuco, Brazil, Mr. Lachlan shows the cost to be as follows:

Boat hire	$12 80
Porterage	6 00
Purser and one man in charge of mails	12 00
Total	30 80

My report shows the cost for delivering the mail from the steamer to the post-office, which includes boat hire and porterage, to be $19.80. The time occupied by the purser and quartermaster of the steamer in delivering the mail was just 30 minutes.

At Maceio, Brazil, Mr. Lachlan shows the cost to be as follows:

Boat hire	$16 00
Porterage	6 00
Purser and one man in charge of mails	12 00
Making a total of	34 00

The steamer did not call at this port.

At Bahia, Brazil, Mr. Lachlan shows the cost to be as follows:

Boat hire	$12 80
Porterage	16 00
Total	28 80

At this port I was informed by the agent of the steamship company that it cost to deliver our mail from the steamer to the post-office, which includes boat hire and porterage, $13.20.

At Santos, Brazil, Mr. Lachlan shows the cost to be as follows:

Steam-launch	$9 20
Porterage	15 09
Boat hire	8 00
Total	32 29

The steamer did not call at this port.

At Rio de Janeiro, Brazil, Mr. Lachlan shows the cost to be as follows:

Steam-launch	$18 40
Porterage	30 18
Boat hire	16 00
Total	64 58

My report shows the cost to be, including boat hire and porterage, $19.80.

At every port of call the mails were delivered by the purser and one of the quartermasters of the steamer. You will see that at some of the ports charge was made for the service, at others no charge being made. There can be no reason for this that I could see, and the only way to get at this cost is to estimate the time occupied by them, and I have given the time at every port where this charge is made.

I will state that in this I have given you the cost in United States money, valuing a Brazilian milreis at 44 cents.

I am, my dear sir, very respectfully, your obedient servant,

T. M. ARRINGTON,
Post-Office Inspector.

HON. NICHOLAS M. BELL,
Superintendent Foreign Mails, Washington, D. C.

No. 4.—THE UNITED STATES AND BRAZIL MAIL STEAMSHIP COMPANY.

[Paul F. Gerhard & Co., general agents, 84 Broad street, New York.]

FREIGHT TARIFF.—SUBJECT TO CHANGE WITHOUT NOTICE.

Articles.	From New York, Baltimore, or Newport News to—													
	Saint Thomas.	Pará.	Maranham.	Pernambuco.	Bahia.	Rio de Janeiro.	Santos.	Paranagua.	Antonina.	Santa Catharina.	Rio Grande do Sul.	Pelotas.	Porto Alegre.	Montevideo.
Blue drills, cotton duck, &c.....per cubic foot..	$0 18	$0 20	$0 25	$0 22	$0 25	$0 23	$0 27	$0 30	$0 32	$0 34	$0 35	$0 36	$0 38	$0 35
Butter, cartridges (on deck), car-wheels (on axles), clocks, fine dry goods, drugs, fire-crackers, lard (in cases), medicines, perfumery, plated jewelry, plated ware, sewing machines, &c.....do....	20	22	27	25	27	25	30	.33	35	37	38	39	40	38
Candles, paper (in bundles), shooks (on deck) soap, &c.....do....	16	18	23	20	23	21	25	28	30	32	33	34	35	33
Cigars, instruments, pictures, teas and tobacco....do....	23	25	30	28	34	28	33	36	38	40	41	42	43	40
Corn or wheat (in shipper's bags).....per bushel.	20	22	27	25	27	25	30	33	35	37	39	40	42	40
Flour.....per barrel (196 pounds).	75	90	1 10	1 00	1 00*	1 05	1 10	1 20	1 30	1 40	1 50	1 60	1 70	1 65
Kerosene (high screw) and spirits turpentine (on deck), per case of 10 gallons	35	36	40	36	40	38	.....	.....	.....	.....	.....	.....	.....	.....
Kerosene (low screw).....per case of 10 gallons..	30	32	36	32	36	33	.....	.....	.....	.....	.....	.....	.....	.....
Lard (in kegs of about 50 pounds gross).....per keg..	27	30	35	33	35	33	35	40	45	50	50	55	60	55
Lumber:														
White pine or spruce (under deck), per 1,000 superficial feet	12 00	15 00	20 00	20 00	22 00	20 00	.....	.....	.....	.....	.....	.....	.....	.....
White pine or spruce (on deck), per 1,000 superficial feet	9 00	12 00	16 00	16 00	18 00	16 00	.....	.....	.....	.....	.....	.....	.....	.....
Yellow pine (under deck), per 1,000 superficial feet..	16 00	18 00	24 00	24 00	26 00	24 00	.....	.....	.....	.....	.....	.....	.....	.....
Yellow pine (on deck).....do....	12 00	15 00	20 00	18 00	21 00	18 00	.....	.....	.....	.....	.....	.....	.....	.....
Measurement goods (not otherwise specified and of small value) per cubic foot	18	20	25	22	25	23	27	30	32	34	35	36	38	35
Nails.....per keg of about 100 pounds..	36	45	55	50	55	50	55	60	65	70	75	80	85	80
Oars (loose).....per running foot..	01½	02	02¼	02	02¼	02	02¼	02½	02⅝	02⅞	02¾	03	03¼	03
Oils.....per barrel of about 50 gallons..	1 60	2 00	2 40	2 25	2 50	2 25	2 50	2 60	2 80	3 00	3 10	3 20	3 30	3 25

Pickled fish, provisions, etc., per barrel of about 300 pounds gross	1 40	1 70	2 00	1 90	2 10	1 90	2 10	2 25	2 40	2 50	2 60	2 70	2 80	2 75
Rosin ..... per 280 pounds gross..	70	90	1 00	1 00	1 00*	1 00	1 10	1 25	1 50	1 75	2 00	2 20	2 40	2 25
Safes (not exceeding 2,000 pounds.) .....per 100 pounds..	70	75	75	75	80	75	85	90	90	90	95	1 00	1 05	1 00
Weight goods (not otherwise specified and of small value) per 100 pounds gross	50	55	65	65	70	65	75	80	80	80	85	90	95	90
Minimum amount for which bill of lading will be signed..	5 00	5 00	5 00	5 00	5 00	5 00	6 00	7 00	7 00	8 00	8 00	8 00	8 00	8 00

Locomotives, machinery, and other heavy goods at special rates. Valuables, one per cent. Ten per cent. primage will be charged in addition to the above rates.

Goods taken by weight, measurement, or valuation at the option of the steamship company, subject to all the conditions in its bill of lading. When two or more classes of merchandise are contained in one package, freight will be charged at the rate applicable to the highest class. No goods received on day previous to or on sailing day. Freight and primage must be *prepaid* upon signing of bills of lading. Parcel receipts ($3 each) given for single packages not exceeding 5 cubic feet and not over 100 pounds. weight, when the contents are of no commercial value. Shippers must pay the cost of elevating grain.

*At Bahia, consignees must pay lighterage and landing expenses on flour and rosin, in lieu of which primage will be waived on these articles for that port.

At St. Thomas, consignees must pay all lighterage.

At all ports, consignees must pay all extra expenses incurred in landing articles weighing over 2 tons, and upon all goods "in transit" to other ports.

I. M. LACHLAN,
General Manager.

NEW YORK, *June* 15, 1886.

No. 5.—*Statement of mail pay received from the Brazilian Government.*

From July 31, 1885, to July 31, 1886 ..... $59,761 14

I certify that the above is a correct transcript extracted from the books of the U. S. and B. M. S. S. Co.

J. ABELS,
Bookkeeper.
I. M. LACHLAN,
Manager.

POST-OFFICE DEPARTMENT,
OFFICE OF FOREIGN MAILS,
Washington, D. C., January 6, 1887.

SIR: I have the honor to transmit herewith a copy of a letter received from Hon. Thomas J. Jarvis, our minister at Rio de Janeiro, together with translations of its inclosures, viz, copies of two mail contracts between the Government of Brazil and the United States and Brazil Mail Steamship Company, dated November 13, 1877, and August 2, 1884, respectively, and an abstract of the mail services rendered by other steamship companies under contract with the Government of Brazil, which was entered in the original (in Portuguese), evidently by inadvertence, under the heading: Contract between the United States and Brazil Mail Steamship Company, of November 13, 1877, and additional contracts of September 17, 1881, and August 2, 1884.

I am, very respectfully, your obedient servant,

NICHOLAS M. BELL,
Superintendent Foreign Mails.

The POSTMASTER-GENERAL.

LEGATION OF THE UNITED STATES,
Rio de Janeiro, July 1, 1886.

SIR: When your agent, Mr. Arrington, was here investigating the mail service he asked me, in accordance with your instructions, to obtain for him information specifically indicated in his written instructions.

In order to obtain such information in an official and authentic form, I addressed on the 25th of May a communication to the foreign office requesting that said information be furnished to this legation at the earliest practicable day.

As the information had not been received when Mr. Arrington left, I promised him in response to his request to forward it to you direct as soon as received.

On yesterday, and not until yesterday, I received from the foreign office a reply inclosing certain papers from the minister of agriculture, commerce, and public works, which I now inclose to you just as received by me.

I have not undertaken to translate these papers, supposing that there is some one in your Department familiar with the Portuguese language.

Regretting that I have not been able to forward these papers at an earlier date, I am,

Respectfully, yours,

THOS. J. JARVIS.

Hon. NICHOLAS M. BELL,
Superintendent Foreign Mails, Washington, D. C.

CONTRACTS BETWEEN THE GOVERNMENT OF THE EMPIRE OF BRAZIL AND THE UNITED STATES AND BRAZIL MAIL STEAMSHIP COMPANY.

Contract made between the director-general of posts, authorized by order of the ministry of agriculture, commerce, and public works of the 12*th of the present month, and the commercial firm of John Roach & Son, of the city of New York, duly represented by Mr. W. P. Tisdel, for maintaining a steamship service between the port of Rio de Janeiro and the port of New York in conformity with decree* 6729 *of the* 10*th of the present month.*

1. The steamers employed in the service between Rio de Janeiro and New York must be of iron and of the first class, of 3,000 tons, constructed of the best materials, and

of the most recent and generally adopted models; their number must be sufficient to guarantee one trip per month and twelve round trips per year; their speed must be 14 miles per hour.

These conditions shall be verified by a commission appointed by the ministry of marine.

2. The steamers will sail from New York, and both going and coming will call at the ports of St. Thomas, Para, Pernambuco, and Bahia. To all these ports the company will convey the mails free of charge by their steamers *both going and coming*.

3. The trip from New York to Rio de Janeiro must be made in twenty-four days, and that from Rio de Janeiro to New York in twenty-three days, inclusive of the stoppages at each port of call.

As soon as the company is ready to do so, a schedule shall be prepared showing the departures and arrivals of the steamers and the stoppages at the ports of call.

4. Failure to make a trip subjects the company to a fine not to exceed 8,000 milreis ($4,000) and to the loss of the corresponding subsidy.

If the company fails to complete any of the trips stipulated in this contract from any cause except the interference of a higher power, duly proved by authentic documents, it becomes subject to a fine not to exceed 4,000 milreis ($2,000) and to the loss of the portion of the subsidy corresponding to the part of the trip which has not been accomplished.

For a delay in sailing or arriving the company will be subject to a fine not to exceed 500 milreis ($250) for every twenty-four hours, excepting cases of the interference of a higher power, referred to above.

Besides these fines, the Government may, on information furnished by the director-general of posts, impose other fines for failures to receive or deliver the mails at the post-offices in due time; for injury to the mails resulting from the manner which they have been packed away on board the steamers; and, finally, for sending on shore a messenger carrying letters and commercial notices in advance of the correspondence contained in the mails, and for having on board a person carrying letters or any other mail matter.

In case of repetition of these failures and violations of the postal regulations, the Imperial Government may annul the contract, if it deems proper, and the company shall not be entitled to any indemnity.

Cases of the interference of a higher power shall be decided by the Imperial Government after consulting with the imperial council of state.

5. The steamers of the company shall enjoy the same advantages and privileges as the steamers of the Messageries Imperiales and of the Royal Mail Steamship Company of Southampton.

6. The rates of passage and freight will be regulated by agreement between the contracting parties, and neither shall be higher than those charged by the United States and Brazil Mail Steamship Company.

7. The company obligates itself to give free passage and accommodation on its steamers to the agent of the post-office accompanying the mails.

8. Colonists or emigrants who intend to reside in the Empire, and who can show documents to that effect from the Brazilian authorities, shall be entitled to reduction of 25 per cent. of the price of passage. The same favor shall be extended to agricultural machines and implements. Public functionaries traveling on account of the Imperial Government are entitled to a reduction of 25 per cent. of the price of passage; and troops and ammunition conveyed by the steamers of the company are entitled to a reduction of 30 per cent.

9. If the company does not possess the necessary steamers, other steamers of the same tonnage, strength, and speed may be substituted for them. This provision also applies in case any of the steamers of the company is lost.

10. The Imperial Government will pay to the company an annual subsidy of 200,000 milreis ($100,000). This subsidy shall be paid quarterly at Rio de Janeiro, in Brazilian money, to the duly-authorized representative of the company.

11. These provisions may be changed by an agreement between the Government and the company.

12. The company shall commence the service stipulated in this contract within six months from the date of organization.

13. Any questions relating to the execution of this contract between the Government and the company shall be settled by arbitration. Each of the contracting parties shall appoint an arbiter, who shall designate a third one, who shall decide in the last instance. If they cannot arrive at an agreement, each one shall designate two persons and select a third arbiter by lot. All questions between private individuals and the company shall be decided in Brazil by the imperial courts.

14. The present contract shall remain in force for a period of ten years, counted from this date. The contract must be approved by the legislative power. The company

shall not be entitled to a subsidy for the services performed as long as the legislative power has not approved the contract. It is understood that the company is not entitled to any subsidy or indemnity in case this approval is withheld.

[SEAL.] LUIZ PLINIO DE OLIVEIRO,
Director-General of Posts.

[SEAL.] JOHN ROACH & SON,
Per W. P. TISDEL.

[Stamp of 2,000 milreis.]

Witnesses:
JOSE RICARDO DE ANDRADE.
ISMAEL AUGUSTO CAVALCANTI DE MELLO.
A. VALENTE-GARCIA.

BARBADORIA, *November* 13, 1877.

Contract between the United States and Brazil Mail Steamship Company, of November 13, 1877, *and additional contracts of September* 17, 1881, *and August* 2, 1884.

Besides the services performed by the United States and Brazil Mail Steamship Company, there will be regular steamship services between the port of Rio de Janeiro and the ports in the north of Brazil:

By the Brazilian Steam Navigation Company, contract of January 18, 1883, renewed January 10, 1884. The steamers of the company will make three round trips per month, sailing from Rio de Janeiro on the 10th, 20th, and 30th day of each month. The time occupied by the round trip between Rio de Janeiro and Pará, inclusive of stoppages at ports of call in the northern provinces, shall be thirty-four days.

By the Hamburg Company, conveying the mails from Santos, Rio de Janeiro, and Bahia, to Lisbon and Hamburg, by steamers sailing from Santos on the 7th and 27th of each month, from Rio de Janeiro on the 10th and 13th, and from Bahia on the 4th and 15th. Besides these trips the steamers of this company shall make another trip every month, the steamer to sail from Santos about the 17th of the month, from Rio de Janeiro about the 20th, and from Bahai about the 25th, the ports of Santos and Bahia being omitted whenever it is deemed convenient.

By the Liverpool, Brazil, and River Plate Mail Steamship Company: The steamers of this company will sail from Rio de Janeiro, carrying mails from Southampton and Antwerp, on the 18th and 28th of every month, and for New York on the 15th and 25th of every month. These dates may be changed by agreement with the director-general of posts. There are other steamship services between the ports in the north of Brazil.

Contracts have been made between the director-general of posts and the following steamship companies:

The Maranhao Steamship Company: Coastwise service between the ports of Sao Luiz de Maranhao and Belem and Pará, with various ports of call; and between Sao Luiz de Maranhao and Fortaleza and Ceara. On the *first* route there will be one trip per month, and on the *second* two. The days of sailing and the time to be occupied in the trips shall be fixed by the governor of the province of Maranhao.

The Bahia Steam Navigation Company: A service of four routes, three of these for northern ports. On the *first* route a steamer will sail on the 5th of each month from Bahia for Penedo, in the province of Alagoas; on the *second* route a steamer will sail on the 15th of each month from Bahia for Maceio, in the province of Alagoas; on the *third* route a steamer will sail from Bahia for the same ports, but will also call at Sao Christovao.

On the one southern route there will be two round trips per month, the steamers sailing from Bahia, on the 10th and 24th of each month, for ports in the southern part of the province of Bahia.

The time occupied by the round trip on these four routes is to be thirty days.

By the *Pernambuco Steam Navigation Company:* Service between the port of Recife, the capital of the province of Pernambuco, and the port of Fortaleza, the capital of the province of Ceara, two trips per month; service between the ports of Recife and the port of Aracaju, in the province of Sergipe, two trips per month. The days of sailing, and the time to be occupied by these trips, shall be fixed by the governor of the province of Pernambuco.

SOUTHERN SERVICE.

The *Pacific Steam Navigation Company* will carry the mails from Brazilian ports to Montevideo, Buenos Ayres, and ports on the Pacific twice a month, by steamers sailing from Liverpool every 15 days, calling at Pernambuco on the 19th and at Bahia

on the 22d day after leaving Liverpool. The days of sailing from Brazilian ports, both going and coming, are subject to changes, made by agreement with the British Government and the company.

The *North German Lloyd Steamship Company* will carry the mails from Brazilian ports to Montevideo and Buenos Ayres, by steamers sailing from Bremen on the 1st of each month, calling at Bahia about the 21st and at Rio de Janeiro about the 24th day after leaving Bremen. The Liverpool Steamship Company will carry the mails from Brazil to Montevideo and Buenos Ayres by steamers sailing from Antwerp on the 1st, 11th, and 21st of each month, and from Rio de Janeiro about the 4th, 14th, and 24th of each month.

Contract in addition to those of November 13, 1877, *and September* 17, 1881, *for maintaining a steamship service between the ports of Brazil and New York.*

On the 2d of August, 1884, in this department, between the director-general of posts, Dr. Luiz Betim Paes Leme and John Law Bisset, representative of the United States and Brazil Mail Steamship Company, and in virtue of a decree of his excellency the minister of agriculture, commerce, and public works, of February 8, last, and of an official order of the director of commerce, dated March 7 last, No. 41, the following provisions were agreed upon, in addition to the contract of September 17, 1881, and shall form part of said contract:

1. The maximum time allowed for the trips of the steamers of the subsidized steamship company shall be raised to twenty-eight days for the trip between New York and Rio de Janeiro, and to twenty-seven days for the trip between Rio de Janeiro and New York.

II. Extraordinary trips made by the steamers of the company shall not be subject to the provisions of the contracts in force. The company shall indicate the dates on which these trips will be made, so that they may not be confounded with the ordinary trips, and render impossible the carrying out of the contracts.

III. The present additional contract is made subject to the approval of his excellency, the minister of agriculture, commerce, and public works.

The representative of the company referred to having accepted, in the name of the company, the above provisions, as additions to the contracts of November 13, 1877, and September 17, 1881, the present document has been drawn up, and has been signed by the director-general of posts, by the representative of the company, and by Ismael Agusto Cavalcanti de Mello, Joas Luiz Rodrigues Pinheiro as witnesses. And I, Jose Ricardo de Andrade, chief clerk of this department, have signed my name to it.

JOSE RICARDO DE ANDRADE.
LUIZ BETIM PAES LEME.

[Two stamps of 400 reis each.]

JOHN LAW BISSET,
Representative of the U. S. and B. M. S. S. Co.

Witnesses:
ISMAEL AUGUSTO CAVALCANTI DE MELLO.
JOAS LUIZ RODRIGUES PINHEIRO.

Additional clause to the additional contract of August 2, 1884.

The United States and Brazil Mail Steamship Company obligates itself to pay to the national Treasury ½ per cent. of the subsidy which it receives in virtue of article 10 of the contract of November 13, 1877, to pay for the services of the inspector of steamship lines subsidized by the state.

November 14, 1884.

[One stamp of 400 reis.]

LUIZ BETIM PAES LEME,
Director-General of Posts.
JOHN L. BISSET,
Representative of the Company.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 83.

INTERNATIONAL PRISON CONGRESS.

MESSAGE

FROM THE

PRESIDENT OF THE UNITED STATES,

TRANSMITTING

A report from the Secretary of State relating to the appointment of delegates to the Fourth International Prison Congress, to meet at St. Petersburg in 1890.

JANUARY 11, 1887.—Referred to the Committee on Foreign Affairs and ordered to be printed.

To the Senate and House of Representatives:

I transmit herewith a report from the Secretary of State, in relation to an invitation which has been extended to this Government to appoint a delegate or delegates to the Fourth International Prison Congress, to meet at St. Petersburg in the year 1890, and commend its suggestions to the favorable attention of Congress.

GROVER CLEVELAND.

EXECUTIVE MANSION,
January 11, 1887.

To the President:

I submit herewith a copy of a note to this Department from Baron Rosen, the Russian chargé d'affaires *ad interim* at this capital, extending an invitation to this Government to participate, by one or more delegates, in the Fourth International Prison Congress, to assemble at St. Petersburg in the year 1890.

The note of the chargé calls attention to the preliminary work to be done pending the actual session of the delegates, and I respectfully recommend that the inclosure herewith may be communicated to Congress, with a view to providing by law for the appointment and proper compensation of a delegate on the part of the United States.

Respectfully submitted.

T. F. BAYARD.

DEPARTMENT OF STATE, *January* 10, 1887.

IMPERIAL RUSSIAN LEGATION,
Washington, July 10 (20), 1886.

SIR: I am instructed by my Government to inform you that His Majesty the Emperor has been pleased to consent to the next meeting of the International Prison Congress being held at St. Petersburg, in the year 1890, according to the unanimous desire expressed by the last Congress, assembled at Rome in 1885.

I am further instructed to transmit to the Government of the United States an invitation of the Imperial Government to participate in the coming Fourth International Prison Congress, to assemble at St. Petersburg, in the year 1890, by appointing a delegate or delegates to attend the same.

The Imperial Government also desires me to bring to your notice the fact that the year (1890) in which the next Prison Congress is to be held coincides with the centenary of the death in Kherson, Southern Russia, in 1790, of the famous philanthropist, John Howard, whose writings and personal efforts gave the first impetus to prison reform in Europe.

A committee of organization having been appointed and intrusted with all the necessary work preparatory to the assembling of the congress, the Imperial Government invites all participating Governments to give notice at the earliest possible opportunity, either through their diplomatic representatives or through their delegates to the Permanent International Prison Commission, of any suggestions they may have to make with a view to the furtherance of the objects of the congress, and of such proposals as they may wish to submit to its consideration, in order that their wishes might be duly consulted in preparing the programme of the coming Fourth International Prison Congress.

Accept, sir, &c.,

ROSEN.

Hon. T. F. BAYARD,
Secretary of State.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 84.

SEWERAGE DRAINAGE, QUARTERMASTER'S CORRAL, WASHINGTON, D. C.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

An estimate from the Secretary of War of an appropriation for sewer-drainage for quartermaster's corral, Washington, D. C.; also referring to estimate for drainage for the Bureau of Engraving and Printing.

JANUARY 10, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 7, 1887.

SIR: I have the honor to transmit herewith, for the consideration of Congress, copy of letter of the Secretary of War, of the 6th instant, submitting an estimate for an appropriation of $2,500, to provide sewer drainage for the quartermaster's corral, in this city. As this sewer is to provide proper drainage for the Bureau of Engraving and Printing also, I would invite attention to a like estimate, transmitted by this Department on the 4th instant, and printed as House Ex. Doc. No. 56.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

WAR DEPARTMENT,
Washington City, January 6, 1887.

SIR: I have the honor to forward herewith, for transmission to Congress, an estimate ($2,500) to provide sewer drainage for the quartermaster's corral, Washington, D. C.

Very respectfully,

WM. C. ENDICOTT,
Secretary of War.

The SECRETARY OF THE TREASURY.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1888.

Quartermaster's corral, Washington D. C.:
To provide sewer drainage for the quartermaster's corral, Washington, D. C. (submitted) $2,500 00

NOTE—The necessity for this estimate is explained in the report of the Quartermaster-General, dated December 20, 1886, and its accompanying papers.

Explanation of estimate for quartermaster's corral, Washington, D. C.

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., December 20, 1886.

SIR: I have the honor to invite attention to the inclosed papers, requesting that an appropriation of $2,500 be asked from Congress for providing proper sewer drainage for the quartermaster's corral, &c.

The present output will be entirely closed so soon as that portion of the Potomac Flats lying immediately west of the corral is further filled to the depth of, say, about two feet.

Proper drainage, as shown in red on the accompanying tracing, can be provided for the amount stated above, that will be ample not only for the corral, but also for the Subsistence Depot, the Bureau of Engraving and Printing, and that portion of the city lying south of the corral.

The following papers are herewith inclosed: (1) The tracing above referred to; (2) copy of letter from the Engineer Commissioner, District of Columbia, to the depot quartermaster, and (3) copy of letter from the Commissioner to the Chief of the Bureau of Engraving and Printing, dated December 18, 1886.

Very respectfully, your obedient servant,

S. B. HOLABIRD,
Quartermaster-General, U. S. A.

The SECRETARY OF WAR.

OFFICE OF THE ENGINEER COMMISSIONER,
Washington, D. C., December 18, 1886.

SIR: In answer to yours of November 18, 1886, I have the honor to inclose a copy of a letter to the Chief of the Bureau of Engraving and Printing of this date, and invite your attention to its contents. I inclose also a plan illustrative of the same.

It is hoped that the co-operation suggested in the letter inclosed may be effected, and that the sewerage of both can be provided for in the manner proposed.

Respectfully,

WILLIAM LUDLOW,
Engineer Commissioner, District of Columbia.

Col. R. N. BATCHELDER,
Deputy Quartermaster-General, U. S. A.

A true copy.

R. N. BATCHELDER,
Deputy Quartermaster-General, U. S. A.

Office of Depot Quartermaster U.S.A.

Washington, D.C.

Dec. 20th 1886

A true Copy

R. N. Batchelder

Lt. Col. & Deputy Qr. Mr. General U.S.A.

H Ex. 84. 49 2

Eng'r. Dep't D. C.

Dec. 14th, '86.

Scale, 100 ft. to 1 in.

Red figures shows Elevations

Blue " "

Potomac Reserve

Wood Piles.

Retaining Sewer

Long Bridge

3" dia.

Md. Ave.

233

Sq. 232

Sq. 237

STABLE

STABLE

STABLE

8" pipe

Feed House

SHOP

CARPENTER SHOP

Blacksmith Shop

SHED

QUARTERS

WAGON HOUSE

Marine

TOP OF BANK

FENCE

15" pipe

W Building line

18" d.

15" dia.

15th, W.

NEW SHOP

STABLE

FARRIER SHOP

Asphalt

Bureau of Engraving and Printing

SHED

Carpenter Shop

CARRIAGE HOUSE

STABLE

12" d.

24" d.

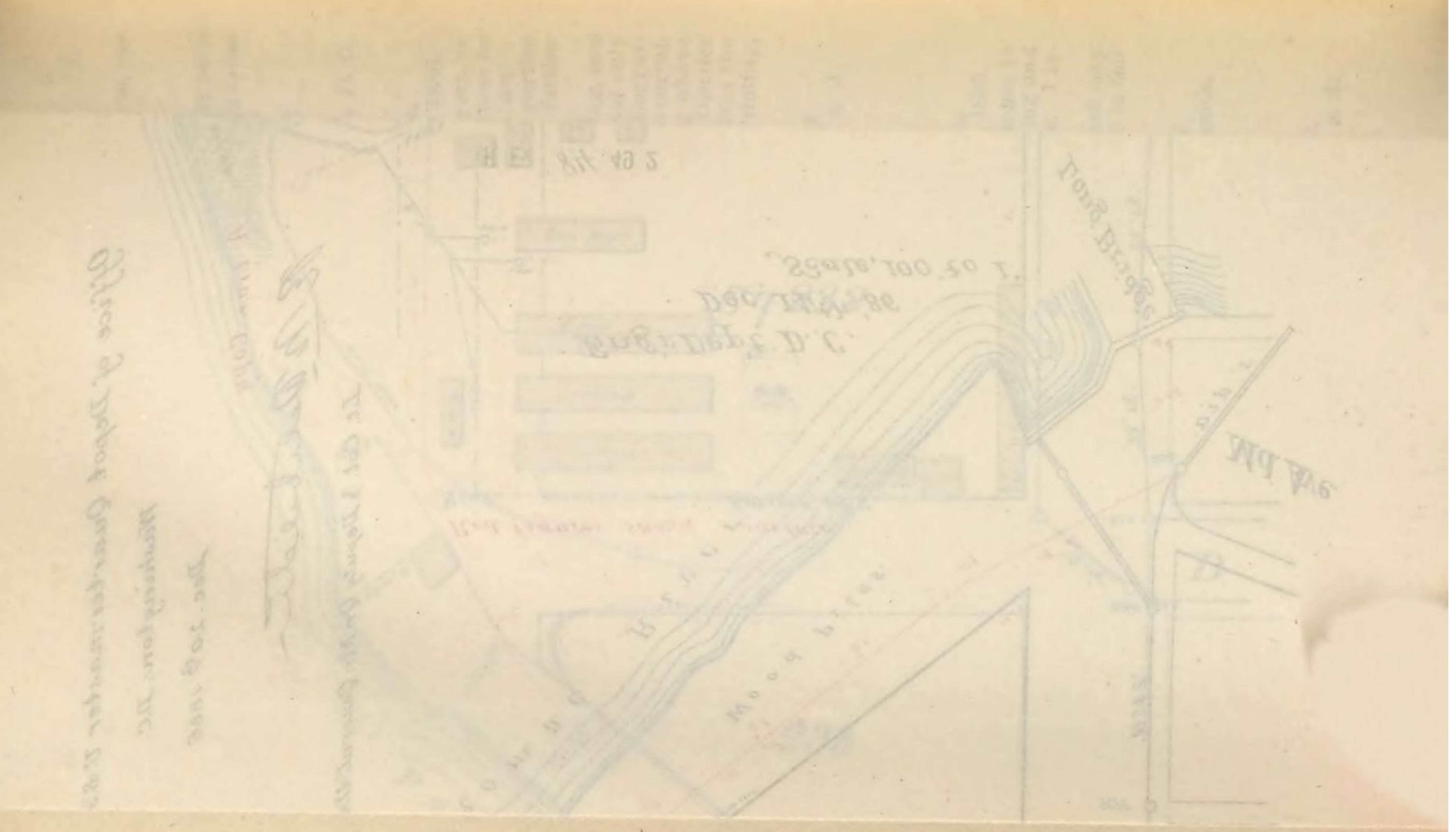
15" d.

14th, W

B. S

C.

D



OFFICE OF THE ENGINEER COMMISSIONER,
Washington, D. C., December 18, 1886.

SIR: I have the honor to inform you that the $1,200 appropriated in the sundry civil bill for 1887 for the construction of a new sewer from the south side of the Bureau of Engraving and Printing to the corner of Fourteenth and D streets, to connect at that point with the city sewer, is insufficient for the purpose.

On account of the depth to which it is necessary to go to furnish proper drainage to the Bureau, the estimated cost of the sewer, shown in blue on the inclosed tracing, is $1,994.35.

In this connection I desire to call your attention to the desirability of providing for the proper drainage of your building, as shown in red on the same tracing, by which the sewage of the quartermaster's corral can also be intercepted, kept from the reclaimed flats, and delivered into the river below the Long Bridge. The estimated cost of the sewer, as shown in red, is $2,443.30.

As the Quartermaster's Department requires means of sewerage, it is suggested that you unite with that department in procuring an appropriation of $2,500 from Congress to construct the sewer in the manner proposed.

Respectfully,
WILLIAM LUDLOW,
Engineer Commissioner, District of Columbia.

The CHIEF OF THE BUREAU OF ENGRAVING AND PRINTING,
Washington, D. C.

A true copy.

R. N. BATCHELDER,
Deputy Quartermaster-General, U. S. A.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 85.

AMOUNTS DUE CHARLES McCAFFERTY AND D. AND C. P. DULL.

LETTER

FROM

THE SECRETARY OF WAR,

STATING,

In compliance with a provision of the river and harbor act of August 2, 1882, the amounts due Charles McCafferty and D. and C. P. Dull, contractors for locks on the Great Kanawha.

JANUARY 13, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 12, 1887.

The Secretary of War has the honor to report to the House of Representatives, in accordance with the provisions of the river and harbor act of August 2, 1882, wherein he is directed to settle the claims of Charles McCafferty and of D. and C. P. Dull, contractors for locks on the Great Kanawha River, that he has examined the said "claims of Charles McCafferty and D. and C. P. Dull, contractors for Locks No. 4 and 5 on the Great Kanawha River, under contracts made in 1874 and 1875, and subsequently for work done by reason of changes in the contracts and for losses caused by such changes and by extra work and other losses incurred from such and other causes beyond their control," and having heard their allegations, proofs, and arguments, and examined all evidence available and bearing on the questions submitted, he finds that by reason of changes in the contracts, for losses caused by such changes, for extra work, and for other losses from causes beyond their control the amount due said contractors is as follows, viz:

To Charles McCafferty	$30,376 15
To D. and C. P. Dull	34,379 30

WM. C. ENDICOTT,
Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. Doc No. 86.

EQUALIZATION OF ARMY PROMOTIONS.

LETTER

FROM

THE SECRETARY OF WAR,

TRANSMITTING,

With inclosures, a draught and recommending the passage of a bill to effect a rearrangement of grades of office in the Adjutant-General's Department of the Army.

JANUARY 13, 1887.—Referred to the Committee on Military Affairs and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 11, 1887.

The Secretary of War has the honor to submit to the House of Representatives, for the consideration of the Committee on Military Affairs, a draught of a bill which the Adjutant-General is very desirous of having passed, and which, as will be seen by the accompanying papers, meets with the approval of the Lieutenant-General commanding the Army, and Major-General Schofield, the senior major-general. The "statement of fact" which accompanies the papers shows the necessity for some legislation to equalize the promotion of the officers of this corps with those of the other branches of the staff, and the organization proposed by the bill is in keeping with the latest legislation of Congress with regard to the staff corps, as shown in the organization of the Inspector-General's Department and the Judge-Advocate-General's Department, in each of which, by comparatively recent legislation, the number of higher grades has been increased relatively to the lowest.

In view of these facts I beg the favorable and speedy consideration of the committee.

WM. C. ENDICOTT,
Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

AN ACT to effect a rearrangement of grades of office in the Adjutant-General's Department of the Army.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Adjutant-General's Department of the Army shall consist of one adjutant-general, with the

rank, pay, and emoluments of brigadier-general; four assistant adjutants-general, with the rank, pay, and emoluments of colonel; six assistant adjutants-general, with the rank, pay, and emoluments of lieutenant colonel; and six assistant adjutants-general, with the rank, pay, and emoluments of major: *Provided*, That the vacancies in the grade of colonel and lieutenant-colonel created by this act shall be filled by the promotion by seniority of the officers now in the Adjutant-General's Department.

ADJUTANT-GENERAL'S OFFICE,
Washington, D. C., January 6, 1887.

GENERAL: I have the honor to submit the inclosed draft of a bill for the reorganization of my department of the general staff, which it is intended, with your sanction, to submit to the Military Committees of the Senate and House of Representatives.

Believing that the bill, should it become a law, will be in the direct line of the best interests of the military service, I beg to submit the following brief remarks in support of the proposed change, and sincerely trust that the measure will receive your favorable consideration and full official sanction.

According to the theory and custom of our service, and the regulations of the Army, the assistant adjutant-general of every command is, by the very nature of his office, the chief of the staff on which he serves, and, under the general officer in command, directs the service in the entire command. His rank, therefore, should be proportional to the paramount importance of his duties, as well as to his superior intelligence, knowledge, and ability, by the aid of which alone he can properly perform them. A glance, however, at the *personnel* of the staff of the commanding generals of the several divisions and departments will show that, with one exception, the officers of the Adjutant-General's department are disadvantageously situated as to rank, relatively to their associate staff officers of other staff departments, in some instances to the extent of two grades to their prejudice. This inequality is manifest, and, while due to the accident of organization, it becomes a military injustice demanding rectification.

For the convenience and facility of command and administration of military affairs the entire territory of the United States is divided into three great military divisions, to wit, the Atlantic, the Missouri, and the Pacific. These divisions are further subdivided into eight department, in two of which, owing principally to geographical position, the functions of command are temporarily merged in those of the commander of the division in which they are comprised. This leaves six active departments, commanded respectively by the six brigadier-generals of the line of the Army.

The wisdom of the present territorial division of the country has been fully demonstrated by more than twenty years' experience, and leads to the conclusion that any departure from this system must be remote. In view of this, the underlying reason for the desired change of organization becomes apparent. In addition to the senior colonel, whose services should be employed in the War Department, and at the headquarters of the Army as principal assistant to the Adjutant-General, the bill provides for one colonel for each of the three military divisions, one lieutenant-colonel for each of the departments, leaving six majors (instead of ten as in the present organization) available for as-

signment to duty in the office of the Adjutant-General, and at such division and department headquarters as the imperative demands of the service may require.

Believing the present time is opportune for securing to my department an organization that will free it from the burden of irregularity and injustice that now hampers its members, I do not doubt, if sanctioned and approved by you, it will receive the favorable consideration of Congress, as such action, while beneficial to the interests of the service at large by harmonizing inequalities and discrepancies of rank, cannot in any way injuriously affect the rank or interest of any officer of the Army.

In conclusion, I beg to remark that my advocacy of the proposed measure is solely due to a keen appreciation of the military injustice which the present organization does to the officers of my department. The time is rapidly approaching when, in pursuance of law, I shall relinquish the active control of the Adjutant-General's Department, and it would afford me great pleasure and official gratification to transfer to my successor a department organized on a true military basis, and on a footing commensurate with its important duties and responsibilities.

I have the honor to be, general, very respectfully, your obedient servant,

R. C. DRUM,
Adjutant-General.

Lieut. Gen. P. H. SHERIDAN,
Commanding the Army.

HEADQUARTERS ARMY OF THE UNITED STATES,
Washington, D. C., January 8, 1887.

SIR: I have the honor to forward herewith draught of "An act to effect a rearrangement of grades of office in the Adjutant-General's Department of the Army," and earnestly recommend its approval and transmission to Congress.

It is unnecessary for me to go into details in advocating this proposed rearrangement of grades in the Adjutant-General's Department, as the brief herewith and the within letter of the Adjutant-General fully set them forth. There are no officers in the public service whose duties are more laborious than those of this corps, and long-deferred promotion in the corps, which arises from its faulty organization, is not the reward that these men should receive. The position they occupy and the duties they are required to perform should place them at least on an equality of rank with their brother officers of other corps, and I hope that Congress will remove the disadvantage they now labor under by enacting into law the proposed rearrangement.

The Adjutant-General's letter modestly, clearly, and correctly shows the necessity in this case on the ground of public interest as well as the personal benefit of long deferred reward to valuable men in the intermediate grades, and I fully coincide in all he says.

I submit also a communication from Major-General Schofield, commending the proposition in high terms.

Very respectfully, your obedient servant,

P. H. SHERIDAN,
Lieutenant-General, Commanding.

The SECRETARY OF WAR.

HEADQUARTERS DIVISION OF THE ATLANTIC,
GOVERNOR'S ISLAND, NEW YORK CITY,
December 31, 1886.

SIR: Being informed that Congress will be asked to pass an act to reorganize the Adjutant-General's department of the Army so as to give to the officers of that department rank corresponding to their duties, I desire to express my concurrence in the military reasons upon which this proposition is based.

For military purposes the United States must continue to be divided into at least three divisions, as at present. The assistant adjutant-general of each of these divisions should manifestly have the rank next below that of the Adjutant-General of the Army, viz, that of colonel. The senior assistant in the War Department, who must frequently perform the duties of adjutant-general, should also, it is equally clear, have the rank of colonel.

The appropriate rank for the staff officer of a department would then be, of course, that of lieutenant-colonel, and these officers should be six in number, to correspond with the present minimum number of departments into which the country is divided. Hence it seems to me clear that without increasing the number of officers in the Adjutant-General's department it would be eminently proper to so change the organization as to make four colonels and six lieutenant-colonels.

Very respectfully, your obedient servant,

J. M. SCHOFIELD,
Major-General, Commanding.

The ADJUTANT-GENERAL, U. S. Army,
Washington, D. C.

STATEMENT OF FACT TO ACCOMPANY THE PROJECT FOR AN ACT RELATIVE TO THE ADJUTANT-GENERAL'S DEPARTMENT OF THE ARMY.

WASHINGTON, D. C., *December* 22, 1886.

The following officers of the Army are the senior three in the grade of major in the Adjutant-General's Department; likewise they are the senior three majors in the Army:

(1) Greene, Oliver D.
(2) Breck, Samuel.
(3) Wood, H. Clay.

(1) Major Greene was appointed assistant adjutant-general, with the rank of major, July 17, 1862. He has therefore been a major twenty-four years July 17 last.

As major, he ranked in the Inspector-General's Department all the present officers except General Baird and Colonel Jones.

He ranked every officer now in the Judge-Advocate-General's Department.

He ranked every officer now in the Quartermaster's Department.

He ranked every officer now in the Subsistence Department except Colonels Simpson and Burns and Lieutenant-Colonel Beckwith.

In the Medical Department, Major Greene ranked next below Lieutenant-Colonel and Surgeon Joseph R. Smith.

He ranked every officer now in the Pay Department except Colonel Daniel McClure.

He ranked every officer now in the Corps of Engineers.

He ranked every officer now in the Ordnance Department.

He ranked the Signal Corps.

He ranked every officer now in the cavalry except Colonels Brackett and Carr, who were made majors the same date.

He ranked every officer of artillery.

He ranked every officer now in the infantry arm except Colonel Andrews.

(2) Major Breck was appointed assistant adjutant-general, with the rank of major, July 17, 1862, the same date as Major Green, and consequently the "statement of

fact" as to rank in his case is precisely the same. He has been a major twenty-four years July 17 last.

(3) Major Wood was appointed assistant adjutant-general, with the rank of major, June 24, 1864. He has been a major twenty-two years June 24 last.

In the Inspector General's Department, General Baird and Colonel Jones, alone ranked him.

He ranked every officer now in the Judge-Advocate-General's Department. (Colonel Lieber, who was major and judge-advocate from November 13, 1862, was transferred to the permanent establishment as major February 25, 1867.)

He ranked every officer now in the Quartermaster's Department.

He ranked every officer now in the Subsistence Department except General Macfeely, and Colonels Simpson and Burns, and Lieutenant-Colonels Beckwith and Du Barry.

In the Medical Department, Major Wood ranked next below Lieutenant-Colonel and Surgeon Charles T. Alexander.

He ranked every officer now in the Pay Department, except Colonels Daniel McClure and Rodney Smith.

In the Engineers he ranked every officer now in service, except the Chief of Engineers and Colonels Gilmore, Casey, and Parke.

He ranked every officer now in the Ordnance Department.

He ranked the Signal Corps.

He ranked every officer of cavalry now in service, except Colonels Brackett, Carr, Royall, and Otis.

He ranked every officer of artillery.

He ranked every officer now in the infantry arm, except Colonels Andrews, Wheaton, Black, Carlin, and Dodge.

According to length of continuous commissioned service in the Army—

(1) Major Green, entered the Army July 1, 1854, and his length of continuous service exceeds that of all officers now in the Army, with the following exceptions, viz:

In the Inspector-General's Department, General Baird and Colonel Jones.

In the Quartermaster's Department, General Holabird, Colonels Saxton and Perry, Lieutenant-Colonels Hodges and Chandler, and Colonel Bingham and Lieutenant-Colonel Sawtelle, who are of the same date.

In the Subsistence Department, General Macfeely, Colonels Simpson and Burns, Lieutant-Colonels Beckwith, DuBarry, Bell, Majors Hawkins and Wilson, and Major Morgan, who is of the same date.

In the Medical Department, by length of service, he would rank next below Lieutenant-Colonel and Surgeon Richard H. Alexander.

In the Corps of Engineers, General Duane, Colonels Gillmore, Casey, Parke, Mendell, and Abbot, who is of the same date, and Lieutenant-Colonel Craighill.

In the Ordnance Department, General Benét and Colonel Crispin.

In the cavalry, Colonels Carr, Otis, and Sweitzer, and Lieutenant-Colonel Tilford.

In the artillery, the Colonels and Lieutenant-Colonels Piper and Mendenhall, and Closson and Langdon, who are of the same date, and Major Livingston.

In the infantry, Colonels Kautz, McCook, Black, Carlin, Dodge, Mason, Blunt, Swaine, Douglass, Chambers, and Bliss, who is of the same date.

(2) Major Breck entered the Army July 1, 1855, and his length of continuous service exceeds that of all officers now in the Army, with the following exceptions, viz:

In the Inspector-General's Department, General Baird and Colonel Jones.

In the Quartermaster's Department, General Holabird, Colonels Saxton, Bingham, Perry, Lieutenant-Colonels Hodges, Chandler, Sawtelle, and Reynolds.

In the Subsistence Department, General Macfeely, Colonels Simpson, Burns, Lieutenant-Colonels Beckwith, DuBarry, Bell, Majors Morgan, Hawkins, Wilson, and Small, who is of the same date.

In the Medical Department, by length of service, he would rank next below Lieutenant-Colonel and Surgeon Joseph R. Smith.

In the Corps of Engineers, General Duane, Colonels Gillmore, Casey, Parke, Mendell, Abbot, and Lieutenant-Colonels Craighill and Comstock and Elliott, who are of the same date.

In the Ordnance Department, General Benét and Colonel Crispin.

The Chief Signal Officer, General Hazen, is of the same date.

In the cavalry, Colonels Brackett, Carr, Royall, Otis, Dudley, Sweitzer, and Lieutenant-Colonels Tilford and Green.

In the artillery, the Colonels and Lieutenant-Colonels Piper, Closson, Mendenhall, Langdon, and Majors Livingston and Graham.

In the infantry, Colonels Kautz, Wheaton, McCook, Black, Carlin, Dodge, Mason, Blunt, Swaine, Douglass, Chambers, Bliss; and Lieutenant-Colonel Lazelle, who is of the same date.

(3) Major Wood entered the Army June 27, 1856, and his length of continuous service exceeds that of all officers now in the Army, with the following exceptions, viz:

In the Inspector-General's Department, General Baird and Colonel Jones.

In the Quartermaster's Department, General Holabird, Colonels Saxton, Bingham, Perry, Lieutenant-Colonels Hodges, Chandler, Sawtelle, and Reynolds.

In the Subsistence Department, General Macfeely, Colonels Simpson, Burns, Lieutenant-Colonels Beckwith, Du Barry, Bell, Majors Morgan, Hawkins, Small, and Wilson.

In the Medical Department, by length of service, he would rank next below Lieutenant-Colonel and Surgeon Joseph R. Smith.

In the Corps of Engineers, General Duane, Colonels Gillmore, Casey, Parke, Mendell, Abbot, Lieutenant-Colonels Craighill, Comstock, and Elliot.

In the Ordnance Department, Benét and Colonel Crispin.

The Chief Signal Officer, General Hazen, ranks Major Wood, by length of service, by one year only.

In the cavalry, Colonels Brackett, Carr, Royall, Otis, Dudley, Sweitzer, and Lieutenant-Colonels Tilford and Green.

In the artillery, the Colonels and Lieutenant-Colonels Piper, Closson, Mendenhall, Langdon, and Majors Livingston and Graham.

In the infantry, Colonels Kautz, Wheaton, McCook, Black, Carlin, Dodge, Mason, Blunt, Swaine, Douglass, Chambers, Bliss, and Lieutenant-Colonel Lazelle.

To state the case more concisely, and, if possible, to present in a more striking manner the glaring inequality or unfairness (if this word may properly be used) of promotion in connection with the officers whose claims are now under consideration: Majors Green and Breck, as majors, ranked every officer (exclusive of the line general officers) now on the active list, say 2,092, except 22; and Major Wood, as major, ranked every officer except 38, and by length of continuous commissioned service Major Greene's service exceeds that of all officers now in the Army, but 64; Major Breck's that of all but 76; and Major Wood's that of all but 78.

There are officers now in service with the rank of colonel and lieutenant-colonel who originally entered the Army subsequent to the dates on which Majors Greene, Breck, and Wood were promoted to the rank of major.

It will be observed these officers have served in one grade nearly a quarter of a century.

C

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 87.

LUDINGTON HARBOR, MICHIGAN.

LETTER

FROM

THE SECRETARY OF WAR,

TRANSMITTING,

With inclosures, a communication from the Pere Marquette Lumber Company, and recommending that authority be granted by Congress to accept the tendered donation by that company of land to be used in constructing a harbor of refuge at Ludington, Mich.

JANUARY 14, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 11, 1887.

The Secretary of War has the honor to transmit to Congress a copy of a letter of the 17th of September last from F. J. Dowland, secretary of the Pere Marquette Lumber Company, of Ludington, Mich., offering to execute to the United States a deed for a strip of land at Ludington Harbor, to be used in constructing a harbor of refuge, together with a copy of a letter of the 21st of September last on the subject from Capt. D. W. Lockwood, Corps of Engineers; a copy of a communication of the 2d of November last from Captain Lockwood, submitting a summary of the project for the improvement of Ludington Harbor; a sketch of the locality, showing the land required for the improvement of the harbor and indicating its metes and bounds; and a form of deed ceding the land in question to the United States for the purpose stated.

From the report of the Acting Chief of Engineers it appears that the existing project for the improvement of the harbor at Ludington provides for the widening of the extrance to 400 feet by building a new south pier 400 feet south of the present north pier, removing the present south pier and deepening the channel to a depth of 18 feet; and for the execution of this work it is necessary that the strip of land belonging to the Pere Marquette Lumber Company, containing 3.3178 acres, as shown on the accompanying sketch, be secured to the United States.

As will appear from the accompanying papers, the Pere Marquette Lumber Company expresses its willingness at any time to transfer this property to the United States free of cost, and to execute the necessary

warranty deed for the purpose, upon being informed that it will be accepted by proper authority; and it is recommended that Congress grant the necessary authority to accept the proposed donation of land for the purpose of said improvement.

WM. C. ENDICOTT,
Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

PERE MARQUETTE LUMBER COMPANY,
Ludington, Mich., September 17, 1886.

SIR: Yours of August 23, addressed to John Mason Loomis, Chicago, Ill., upon the subject of a title to the land for the enlargement of the harbor at this place, is now in my hands.

John Mason Loomis, being the president of this company, has been in correspondence with this office on the subject in question, and upon which I am now prepared to reply.

The expression used by John Mason Loomis, president, in his letter to you dated January 14, 1885, viz, "I, supposing that I control it," &c., *meant* "provided we have not *sold it.*" We had been selling from the peninsula south of the ferry to parties for a shingle-mill—now burnt down—but said sale was for land quite a distance south of this strip required by the Government, so that this has never been sold, but remains intact. This was why he expressed himself so guardedly.

This company is prepared to execute deed to the Government for the *regular nominal* consideration with us in such cases, as soon as you may be pleased to mail said deed to *this* office, prepared for execution.

You are undoubtedly aware of the fact that a public ferry and highway has been maintained for many years across the present channel, and which has to continue as a thoroughfare for all future time *until* some other route may be established for vehicles, &c., to cross the lake proper. We therefore understand that in such cases—in the widening of channels of this kind—the United States Government makes provision, as the new work progresses, for the protection of the public where ferry-slips have to be used and maintained.

This company being expected to protect the public in its rights to this thoroughfare in the future as in the past, now desires of you, if you please, to state in your reply whether or not the Government recognizes the aforesaid rights while making the necessary improvements already referred to. I await your kind reply.

Yours, very respectfully,

PERE MARQUETTE LUMBER COMPANY.
By F. J. DOWLAND, *Secretary.*

D. W. LOCKWOOD, Esq.,
Captain of Engineers, Grand Rapids, Mich.

UNITED STATES ENGINEER OFFICE,
Grand Rapids, Mich., September 21, 1886.

SIR: I have the honor to forward herewith a letter from the secretary of the Pere Marquette Lumber Company with reference to the transfer by it to the United States of a strip of land on the south side of the present channel, which is needed in carrying out the present plan of improvement at this harbor for making it a harbor of refuge.

There will be no trouble in maintaining the public highway and ferry during the progress of the work, so far as I can determine now.

I would respectfully ask instructions as to the steps to be taken in making the transfer of title referred to in the letter of Mr. Dowland.

Very respectfully, your obedient servant,

D. W. LOCKWOOD,
Captain of Engineers.

The CHIEF OF ENGINEERS, U. S. A.,
Washington, D. C.

UNITED STATES ENGINEER OFFICE,
Grand Rapids, Mich., Nov. 2, 1886.

SIR: I have the honor to forward herewith a form of deed for ceding to the United States a strip of land required for harbor improvements at Ludington, Mich.; also a sketch showing its location, &c.

The following extract from the report of a Board of Engineers constituted by paragraph 1, Special Orders, No. 181, 1884, from headquarters Corps, of Engineers, "for the purpose of examining the harbor of Ludington, Mich., and reporting a plan, with estimate of cost, for making a harbor of refuge at that place, in accordance with the requirements of the river and harbor act of August 2, 1882," and approved by the Chief of Engineers, January 6, 1885, explains the project for carrying out the new improvement.

[Extract.]

"(1) That Pere Marquette Lake affords a much greater area for anchorage than it is practicable to obtain in an outer harbor, and is ample to accommodate all the vessels that would be likely to seek shelter in it from stormy weather in Lake Michigan; that it is completely protected from the heavy seas and gales that may prevail on the larger lake by the sand-spit which separates the two, and which is a natural breakwater.

"(2) The smaller lake being a natural harbor basin, when connected with the larger lake by a passage affording sufficient depth of water, and having an entrance in Lake Michigan, easy of access in all weather, becomes a harbor of refuge of such a character as to meet the requirements of commerce.

"(3) The present entrance to Pere Marquette Lake is 200 feet wide. This is not considered enough, and an increase of width to 400 feet is therefore recommended. In consequence of the location of the piers as they now are, this widening can only be affected by changing the south pier, and this can only be done by constructing a new south pier parallel to and 400 feet from the present north pier, and then removing the present south pier and dredging the passage so as to obtain a depth of 18 feet of water. The board further recommends that the north pier be extended to the 15-foot curve and the new south pier be built out to the 22-foot curve. These piers can be subsequently further extended should it be found necessary to do so.

"The detailed estimate of cost of widening the present entrance to Pere Marquette Lake, as recommended by the Board, is as follows:

800 feet pile revetment, with sheet-piling, at $27.54	$22,032 00
South pier, 1,050 feet piering, 18 feet water, 6 feet superstructure, at $110	125,500 00
600 feet piering, 20 feet water, 6 feet superstructure, $150	97,500 00
North pier, 550 feet piering, 18 feet water, 6 feet superstructure, $110	60,500 00
Removing old pier	25,000 00
	320,532 00
10 per cent. contingencies	32,053 20
	352,585 20
Dredging 222,000 cubic yards, at 30 cents	66,600 00
Total	419,185 20

Very respectfully, your obedient servant,

D. W. LOCKWOOD,
Captain of Engineers.

Brig. Gen. JAMES C. DUANE,
Chief of Engineers, U. S. A., Washington, D. C.

OFFICE CHIEF OF ENGINEERS, U. S. ARMY,
November 9, 1886.

Respectfully submitted to the Secretary of War.

The existing project for the improvement of the harbor at Ludington, Mich., provides for the widening of the entrance to 400 feet by building a new south pier 400 feet south of the present north pier, removing the present south pier, and deepening the channel by dredging to a depth of 18 feet.

For the execution of the work it is necessary that a strip of land belonging to the Pere Marquette Lumber Company, containing 3.3178 acres, as shown on the accompanying sketch, be secured to the United States.

As will appear from the within papers the Pere Marquette Lumber Company expresses its willingness at any time to transfer this property to the United States free of cost and to execute the necessary warranty deed for the purpose, upon being informed that it will be accepted by proper authority.

It is recommended that the offer of the lumber company be accepted, and that the papers be referred to the Department of Justice with request that the proper United States district attorney be instructed to give the matter such attention as may be deemed necessary in the premises, conferring upon the subject with Capt. D. W. Lockwood, Corps of Engineers, whose address is Grand Rapids, Mich.

JOHN G. PARKE,
Acting Chief of Engineers.

WARRANTY DEED.

This indenture, made this —— day of ———, in the year of our Lord one thousand eight hundred and eighty-six, between the Pere Marquette Lumber Company, a corporation existing under the laws of the State of Michigan, and having its office at Ludington village (now city), Mason County, Michigan, party of the first part, and the United States of America, party of the second part, witnesseth, That the said party of the first part, for and in consideration of the sum of one dollar, to it in hand paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, does by these presents grant, bargain, sell, remise, release, alien, and confirm unto the said party of the second part, and its assigns forever, the parcel of land situated just south of the present south pier at entrance to Ludington Harbor, Michigan, which is required in order to increase the width of entrance to said harbor to 400 feet, making it a harbor of refuge, and which is described as follows, to wit: Commencing at a point 1,365 feet south of the intersection of the west line of Ferry street with the center line of Ludington avenue, said point of intersection being 4,505 feet west of a point of 96¾ feet south of the quarter corner common to sections No. 14 and 15, town 18 north of range 18 west, Mason County, Michigan, thence south 6° 23′ west, 212 feet; thence north 83° 37′ west, 666 feet; thence north 6° 23′ east, 222 feet; thence south 79° 52′ east, 667 feet; to place of beginning (variation of needle 3° 15′ east), containing 3.3178 acres, being a part of lot No. 2, of section No. 15, of said town and range; together with all and singular the hereditaments and appurtenances thereunto belonging or in anywise appertaining: to have and to hold the said premises, as described, with the appurtenances, unto the party of the second part, and to its assigns forever. And the said party of the first part, for itself and its successors and assigns, does covenant, grant, bargain, and agree, to and with the said party of the second part, and its assigns, that at the time of the ensealing and delivery of these presents it is well seized of the above granted premises in fee simple; that they are free from all incumbrances whatever; and that it will, and its successors and assigns shall, warrant and defend the same against all lawful claims whatsoever.

In witness whereof the said party of the first part has hereunto set its seal and caused these presents to be subscribed by its president and countersigned by its secretary the day and year above written.

———,
President of the Pere Marquette Lumber Company.

———,
Secretary of the Pere Marquette Lumber Company.

Signed, sealed, and delivered in presence of

———
———.

O

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 88.

EXPENDITURES IN THE NAVY DEPARTMENT.

LETTER

FROM

THE SECRETARY OF THE NAVY,

TRANSMITTING

A statement of expenditures of the contingent fund of that Department for the fiscal year ended June 30, 1886.

JANUARY 15, 1887.—Referred to the Committee on Expenditures in the Navy Department and ordered to be printed.

NAVY DEPARTMENT,
Washington, January 13, 1887.

SIR: I have the honor, in compliance with the requirements of section 193 of the Revised Statutes, to submit to Congress the following detailed statement of the expenditures of the contingent appropriations for the Navy Department, made in the legislative, executive, and judicial act approved March 3, 1885, for the fiscal year ending June 30, 1886, viz:

No. 1. Contingent expenses Navy Department, 1885–'86.

No. 2. Contingent and miscellaneous expenses Hydrographic Office, 1885–'86.

No. 3. Contingent and miscellaneous expenses Naval Observatory, 1885–'86.

Very respectfully,

W. C. WHITNEY,
Secretary of the Navy.

Hon. JOHN G. CARLISLE,
Speaker of the House of Representatives.

No. 1.—*Contingent expenses, Navy Department*, 1886.

Date.	To whom paid.	For what purpose.	Amount.
1885.			
July 6	New York Herald	Subscription, 1 year, to June 30, 1886	$7 50
9	H. Ford	Caning office chair	1 25
9	F. M. Trevoe	3 self-inking stamps	12 00
10	Richard Lee	Hauling	1 00
11	F. B. Conger	Postage-stamps	32 00
12	Fred. A. Schmidt	Faber's pencils	47
12	....do	Velvet rubber	50
13	F. M. Trevoe	Repairing type-writer, &c	4 00
13	James J. Chapman	1 pound wafers	1 50
13	John F. Paret	Cyclostyle	12 00
13	Herman Baumgarten	Self-inking stamp	1 00
14	M. J. Wine	1 dozen card-receivers for file-cases	1 00
14	M. E. Mann	Cyclopedia	7 00
14	L. D. Geneste & Co	Repairing clock-case	35 00
14	Washington Post	Supscription, 1 year, to June 30, 1886	6 00
15	Samuel G. Eberly	300 street-car tickets	11 85
16	E. W. Woodruff	2 dozen file-holders	17 28
16	V. G. Fischer	Stationery	11 20
17	W. H. Porter	Type-writer ribbons, &c	18 00
17	Wyckoff, Seamans & Benedict	Oil-cans, &c	5 40
17	W. H. Porter	Caligraph and cabinet	125 00
17	John A. Smith	Washing 6 dozen toweis	3 00
18	Fred. A. Schmidt	3 dozen Faber's pencils	1 41
17	Wyckoff, Seamans & Benedict	Remodeling type-writer	35 00
18	William Ballantyne & Son	Stationery	4 79
18	J. G. Weaver & Son	Standing desk	32 50
18	Wyckoff, Seamans & Benedict	Repairing type-writer	35 00
20	John C. Parker	6 sets blotter-pads	4 50
20	E. Morrison	Rubber bands	3 50
20	....do	....do	9 14
23	W. W. Farr	Repairing clock	10 00
24	M. E. Mann	Clycopedia	7 00
25	J. Lansburgh	Matting	61 56
25	....do	....do	88 99
25	F. A. Schmidt	Pencils, &c	3 85
27	J. Baumgarten	Stamps and pads	12 63
27	O. C. Fisher	120 car tickets	5 00
27	William A. Wheeler, jr	Pens and ink	10 26
28	Samuel G. Eberly	500 street-car tickets	19 75
28	Wyckoff, Seamans & Benedict	Type-writer	85 00
28	W. F. Lutz	Stamp and ribbons	17 50
28	Fred. A. Schmidt	Pencils	1 40
28	John H. Magruder	Sapolio soap, &c	1 25
29	S. G. Eberly	200 street-car tickets	7 90
29	B. W. Hanna	Hire of carriage	1 00
29	G. G. Cornwell & Son	Feather-dusters, &c	3 60
30	J. Lansburgh	2 stools	6 30
30	William A. Wheeler, jr	Ink, &c	17 66
30	R. H. Marcellus	Gas-stove, &c	2 30
30	William A. Wheeler, jr	Stationery	7 13
30	William Ballantyne & Son	Lancaster pen, &c	7 75
31	George W. Simms	Washing towels	1 95
31	E. Morrison	Rubber bands	13 56
31	Frederick A. Schmidt	Pencils and penholders	7 09
31	W. H. Porter	Wide-carriage caligraph and cabinet	130 00
31	E. Morrison	Rubber bands	5 47
31	F. B. Conger	Postage-stamps	185 00
31	H. Baumgarten	Stamp	6 00
Aug. 1	Brook Shaw	Washing towels	1 13
1	Browning & Middleton	Dusters, &c	7 92
1	....do	....do	92
1	....do	Babbit soap	2 69
1	J. G. Weaver & Son	Repairing chart-cases, &c	94 00
1	William Ballantyne & Son	Letter paper	53 60
3	E. Morrison	Rubber bands	17 75
3	....do	....do	98
4	F. A. Schmidt	Pencils, erasers, &c	18 86
4	Samuel West	Washing towels	2 50
4	V. G. Fischer	Stationery	46 00
4	....do	....do	5 50
4	....do	....do	12 60
4	....do	....do	38 87
5	Charles D. Sydnor	Washing towels	1 50
5	J. W. Boteler & Son	Water-cooler, &c	16 00
5	William A. Wheeler, jr	Stationery	60 78
6	F. A. Schneider	Duster, brushes, &c	1 70
6	J. C. Hart	Washing towels	2 33
6	W. B. Moses & Son	Office chair, 2 yards felt, &c	9 80
6	V. G. Fischer	Stationery	416 54
6	F. A. Schmidt	....do	13 38
6	William Ballantyne & Son	....do	47 30

No. 1.—*Contingent expenses, Navy Department*, 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
1885.			
Aug. 7	Luttrell & Wine	2 dozen towels	$6 05
7	V. G. Fischer	Stationery	58 38
10	Nathan Addison	300 street-car tickets	11 85
10	L. H. Hopkins	Hardware	4 35
10	V. G. Fischer	Stationery	42 32
10	....do	....do	20 61
10	....do	....do	186 30
11	James E. Brophy	Rubber stamp	1 50
11	F. Mason	Washing towels	97
12	V. G. Fischer	Stationery	37 38
12	William Ballantyne & Son	....do	5 00
13	V. G. Fischer	....do	3 62
13	William A. Wheeler, jr	....do	197 60
15	C. F. Schmidt	2 dozen towels	5 77
15	V. G. Fischer	Stationery	90
15	Noble Snowdon	Washing towels	1 80
15	C. H. Middleton	Postage-stamps	5 03
18	V. G. Fischer	Stationery, &c	29 90
18	Washington and Georgetown Railroad Company.	240 street-car tickets	10 00
18	Stott, Cromwell & Co	Combs, brushes, &c	25 73
19	L. Schmidt & Sons	Repairing lock	75
19	V. D. Fischer	4 reams press copy paper	3 40
20	Easton & Rupp	Indexes	2 40
20	William Orme & Sons	Dusters	7 50
21	Adams Express Company	Freight	7 75
21	Wyckoff, Seamans & Benedict	Copying ribbon	1 00
17	....do	Remodeling type-writer	22 00
22	William Ballantyne & Son	Stationery	14 64
23	J. L. Harmon	Subscription to National Republican, month of July, 1885.	50
25	V. G. Fischer	Stationery	33 91
28	Wyckoff, Seamans & Benedict	Remodeling type-writer	35 00
28	J. W. Boteler & Son	1 dozen tumblers	1 00
31	V. G. Fischer	Envelopes and ink	5 38
31	R. H. Evans	Ink for type-writer	25
Sept. 1	William A. Wheeler, jr	Stationery	53 09
2	James J. Chapman	125 sheets Bristol board	24 50
2	V. G. Fischer	Stationery	4 25
2	R. B. Bare	127 street-car tickets	5 00
4	Abram Jones	Glazing book-case	4 00
4	V. G. Fischer	Stationery	23 73
5	Easton & Rupp	Indexes	1 05
5	T. H. S. Hamersly	Subscription to United Service, 6 months	2 00
5	William F. Lutz	Stamp	10 00
7	F. A. Schmidt	Stationery	3 64
8	Woodward & Lothrop	1½ dozen towels	4 50
10	V. G. Fischer	Eyelet punch and set	2 50
12	Fred. A. Schmidt	Stationery	85 77
15	V. G. Fischer	....do	5 05
15	Adams Express Company	Freight on charts	10 95
15	C. N. Whitney	Fountain-pens	5 00
16	Susan Johnson	Washing towels	2 66
17	William A. Wheeler, jr	Stationery	8 09
17	H. L. Pelouze & Son	Composing and 4 electros and 20-inch leads	11 00
17	V. G. Fischer	Waste-paper baskets	1 50
17	W. H. Ijams	Freight	60
18	B. Westermann & Co	Book	3 00
18	John H. Cook	Bucket	40
19	W. H. Stevenson	Walnut screen	28 00
19	S. H. P. Dyer	Translating	6 00
19	V. G. Fischer	Stationery	6 55
19	Willet & Libbey	Lumber	11 98
19	Alex. Milne	Washstand	18 00
21	M. W. Beveridge	Toilet set	6 50
21	W. R. McLean	Lumber	10 00
21	E. D. Curry	Hemming towels	2 50
22	Wyckoff, Seamans & Benedict	Ribbon	1 00
22	F. A. Schneider	Drawer lock	40
22	O. C. Fisher	Cartage	25
23	Chauncey Thomas	Transportation	5 00
23	William Ballantyne & Son	Stationery	16 60
24	V. G. Fischer	....do	30 82
24	John M. Robinson	210 tin file-boxes	26 25
25	William A. Wheeler, jr	Stationery	25 02
25	Baltimore and Ohio Express	Freight	1 60
26	William F. Lutz	Stamp	6 00
26	William A. Wheeler, jr	Stationery	5 40
28	Fred. A. Schmidt	....do	1 41
28	George W. Knox	Freight	4 80

No. 1.—*Contingent expenses, Navy Department*, 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
1885.			
Sept. 30	Washington and Georgetown Railroad Company.	240 street-car tickets	$10 00
Oct. 2	Wyckoff, Seamans & Benedict	Copying ribbon	1 00
3	Stott, Cromwell & Co	½ gross soap	8 10
3	G. W. Woolley	50 patent reservoir attachment for pens	12 50
3	L. H. Hopkins	Hardware	9 84
3	William F. Lutz	Dating stamps	7 50
5	V. G. Fischer	1 roll blue process paper	3 25
5	E. Morrison	Paper tester, &c	155 25
5	....do	Rubber bands	12 57
5	W. W. Clements	Repairing telegraph wire	2 00
6	Appleton, Tompson & Co	Commercial and shipping list	8 00
6	Wheatley Brothers	2,000 feet rollers for charts	25 00
6	E. M. Willis	Ice for quarter ending September 30, 1885	108 13
8	C. H. Middleton	Postage-stamps	5 00
8	Herman Baumgarten	Stamp	1 00
8	James J. Chapman	2 table baskets	2 00
9	George Cartner	Encyclopedia	6 00
10	William A. Wheeler, jr	Stationery	18 65
10	Woodward & Lothrop	2 dozen towels	6 00
10	V. G. Fischer	Stationery	78 53
12	Adams Express Company	Freight	32 70
12	S. H. P. Dyer	Translating	25 89
12	Washington City post-office	Special-delivery postage-stamps	2 00
12	Wyckoff, Seamans & Benedict	Remodeling type-writer and supplies	50 70
13	L. H. Hopkins	Walnut seats and tacks	2 63
14	V. G. Fischer	Stationery	10 15
14	W. B. Moses & Son	Revolving chairs and mirror	31 00
14	William Ballantyne & Son	Stationery	51 18
15	L. H. Hopkins	Hardware	95
16	George Cartner	Encyclopedias	37 00
16	J. Underwood & Co	1 dozen type-writing ribbons	9 00
20	Maritime Register Publishing Company.	Subscription to June 30, 1886	15 00
21	Burton Rudd	Hauling books	1 00
22	V. G. Fischer	Stationery	10 98
22	F. A. Schmidt	..... do	1 32
22	Geo. W. Knox	Freight	1 44
22	Chas. F. Moore	Paste	2 50
24	Thad. K. Sailer	Administering oaths in 13 cases	6 50
24	V. G. Fischer	Stationery	7 50
24	Fred. A. Schmidt	.....do	6 21
26	Wyckoff, Seamans & Benedict	1 type-writer, remodeling a type-writer, ribbons, &c.	92 00
26	J. J. Chapman	Arm-rest	1 50
27	M. J. Wine	File-cases	15 50
27	Browning & Middleton	50 cakes soap	2 75
29	D. J. Partello	Administering oaths	5 00
29	Robert Beall	1 gross pens	1 25
29	D. J. Partello	Administering oaths	5 50
29	Royce & Marean	Observatory attachment to clock, and connecting same with Department time circuit.	24 10
30	V. G. Fischer	Stationery	48 82
31	Easton & Rupp	Bristol-board	25
31	J. Baumgarten	Rubber stamp, &c	1 85
31	W. B. Moses & Son	Blue cloth	1 00
Nov. 2	Woodward & Lothrop	1 dozen towels	2 95
3	J. L. Whittington	Stamp, &c	6 25
3	V. G. Fischer	Stationery	4 80
3	Wm. Ballentyne & Son	.....do	152 29
4	Baily & Davison	Copying-press, stand, and pads	61 25
4	Elphonzo Youngs	2 gross matches, &c	3 20
4	Petersen & Childs	Carpets, &c	174 15
5	William A. Wheeler, jr	Stationery	15 98
5	D. J. Partello	Administering oaths	70 00
5	C. C. Bryan	3 cans astral oil	1 50
7	Wyckoff, Seamans & Benedict	Type-writer ribbon	1 50
7	J. G. Weaver & Son	Walnut standing desk	37 50
9	Wyckoff, Seamans & Benedict	1 dozen type-writing ribbons	9 00
9, 10	V. G. Fischer	Stationery	35 66
11	James J. Chapman	2,000 steel staples	1 00
11	C. A. Schneider's Sons	1 iron sink	8 25
11	John J. Chew	Administering oaths	2 00
12	Adams Express Company	Freight	11 15
12	Francis T. Bowles	1 copy Proceedings U. S. Naval Institute	2 00
12	E. Morrison	Bristol cards	90
13	Otho Branson	Carting plates	3 00
13	W. S. Thompson	Soap	3 75
13	W. H. Porter	Type-writing ribbons	10 50
14	J. Baumgarten	Rubber die, &c	1 85

No. 1.—*Contingent expenses. Navy Department*, 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
1885.			
Nov. 14	W. R. McLean	Lumber	$10 50
14	Richard Matthews	Hauling	1 25
16	V. G. Fischer.	Stationery	5 55
16	....do	Envelopes	10 25
17	Woodward & Lothrop	Towels and crash	18 00
19	S. H. P. Dyer	Translating	39 70
19	V. G. Fischer	Insect powders, &c	1 50
19	Adams Express Company	Transportation	25
19	H. O. Towles	Book-case	18 00
20	J. B. Bryan & Bro	½ dozen whisps	1 50
20	Fred. A. Schmidt	2 rulers	1 00
20	Wash. Nailor	Cab hire	2 50
20	E. W. Woodruff	File-holders	40 34
20	B. W. Hanna	Cab hire	75
20	E. W. Woodruff	Desk with file-holders	65 00
21	V. G. Fischer	Stationery	7 74
21	....do	....do	5 00
21	M. Anderson	Repairs to chart-cases, &c	120 41
21	H. Rosendale	Grinding knife	1 50
21	George E. Strobel	Repairing ice-pitcher	50
23	W. H. Porter	Repairs to caligraphs, &c	31 00
23	M. J. Wine	Making files, &c	79 00
24	Richard Mathews	Hauling books	1 25
24	V. G. Fischer	2 penknives	3 50
24	....do	Tracing linen, &c	17 50
24	Wurdeman & Co	Walnut case	43 00
24	Ira Godfrey, jr	Washing towels	43
24	....do	....do	3 83
24	....do	....do	92
24	....do	....do	2 20
24	....do	....do	1 86
24	....do	....do	1 64
24	....do	....do	1 43
24	....do	....do	1 69
24	....do	....do	1 11
24	....do	....do	6 96
24	....do	....do	65
24	....do	....do	2 29
25	Wyckoff, Seamans & Benedict	Type-writer oil	4 00
27	V. G. Fisher	Manila paper	75
27	....do	Stationery	7 92
27	....do	....do	4 75
27	F. A. Schmidt	Pencils	2 11
30	E. W. Woodruff	Walnut standing desk	47 00
Dec. 3	V. G. Fischer	Stationery, &c	3 30
3	George W. Knox	Hauling	1 00
5	E. Morrison	Rubber bands	6 40
5	V. G. Fischer	Ruler, tags, &c	7 25
5	F. B. Conger	Postage-stamps	90 00
7	V. G. Fischer	Stationery	58 48
7	B. W. Hanna	Hire of carriage	1 50
9	F. A. Schmidt	Heliographic paper	12 24
9	Navin & Ogram	Oil and paste	45
9	Fred. A. Schmidt	Lead-pencils	13 61
9	Wyckoff, Seamans & Benedict	Repairs to type-writer	1 50
9	....do	....do	2 00
11	Adams Express Company	Freight charges	15 15
11	V. G. Fischer	Process paper	8 00
12	S. J. Watts	Gas-lighter, &c	1 35
12	L. H. Hopkins	Hardware, &c	6 30
12	....do	Chair-springs, &c	1 80
14	George W. Knox	Hauling books	3 75
15	V. G. Fischer	Envelopes	2 00
15	Nathan Addison	Matches	1 00
16	Katharine Schaefer, administratrix.	Making desk cover	4 00
13	George W. Bagg	Administering oaths	1 00
16	Fred. A. Schmidt	Letter clips, &c	1 35
17	Thad. K. Sailer	Administering oaths	6 00
17	F. B. Conger	Postage-stamps	16 50
17	C. H. Middleton	....do	5 00
19	L. H. Hopkins	Duster, bucket, &c	2 75
19	J. G. Weaver & Son	Walnut case	40 00
21	M. W. Beveridge	Umbrella stand	1 75
22	Fred. A. Schmidt	Pencils, erasers, &c	15 94
22	E. W. Woodruff	File-holders	10 89
22	F. B. Conger	Stamps	1 00
22	E. W. Woodruff	File-holders	18 75
23	J. Baumgarten	Stamps, &c	27 00
24	....do	....do	35 00

No. 1.—*Contingent expenses, Navy Department*, 1886—Continued..

Date.	To whom paid.	For what purpose.	Amount.
1885.			
Dec. 24	V. G. Fischer	Stationery	$24 85
24	....do	....do	19 57
26	J. Baumgarten	2 small stamps	2 50
30	Wyckoff, Seamans and Benedict.	Repairs to type-writer	10 00
30	E. Morrison	Rubber bands	3 95
1886.			
Jan. 2	National Republican	Subscription 6 months	3 00
2	J. Baumgarten	Stamps and die	8 60
2	National Republican	Subscription 5 months	2 50
4	Z. D. Gilman	Sponge and soap	80
4	Fred. A. Schmidt	Pencils	11 39
4	Burton Rudd	Hauling books	50
4	Colegate & Co	Soap	26 81
4	....do	....do	26 81
5	F. A. Schneider	Hardware, &c	6 85
5	S. H. P. Dyer	Translating notices to mariners	37 15
5	F. A. Schmidt	Baskets and brooms	3 15
5	Wm. H. Boyd	5 Directories	25 00
5	....do	1 Directory	5 00
5	....do	....do	5 00
5	....do	2 Directories	10 00
5	L. H. Hopkins	Hardware	7 90
5	F. A. Schneider	Ice-pick	60
6	P. T. McCurdy	Covering 2 desks	8 15
6	Wm. H. Boyd	2 Directories	10 00
6	....do	1 Directory	5 00
6	H. L. Pelouze & Son	Type, cases, &c	28 30
7	E. M. Willis	Ice	90 70
7	F. B. Conger	Stamps	2 00
7	B. Westermann & Co	Expressage	95
7	V. G. Fischer	Rubber dies	2 00
7	....do	Stationery	14 80
8	J. Baumgarten	Repairing stamp	2 00
8	Metropolitan Railroad Company.	240 street-car tickets	10 00
8	J. W. Boteler & Son	Large ewer	75
8	John F. Paret	Engraved cards and parchment	9 50
8	William H. Boyd	Directory	5 00
9	....do	....do	5 00
9	....do	....do	5 00
9	C. H. Middleton	120 street-car tickets	10 00
9	William W. Farr	Winding and keeping clocks in order	30 00
9	William L. Maples	Picture frame	1 75
11	F. V. Walker	100 car tickets	3 95
11	William A. Wheeler, jr	Stationery	8 16
11	....do	....do	5 91
11	....do	....do	39 38
12	W. B. Moses & Son	Felt and gimp	3 30
13	V. G. Fischer	Rubber stamps, &c	2 25
13	H. Baumgarten	Rubber stamp	75
13	M. S. Thompson	3 United States Magazines	1 05
13	William F. Lutz	Dating-stamp, &c	7 25
13	N. Murray	American Journal of Mathematics	10 00
13	Adams Express Company	Transportation	12 70
13	....do	Freight charges	1 95
14	Burton Rudd	Hauling	50
14	J. Baumgarten	Die for stamp	1 75
15	C. C. Bryan	Blacking-brushes	1 10
15	F. A. Schneider	Picture wire and screws	1 20
15	V. G. Fischer	5 rubber dies	5 00
16	American Shipmasters' Association.	1 copy American and Foreign Shipping	15 00
16	George Ryneal, jr	50 gallons coaline, &c	19 05
16	O. C. Fisher	120 car tickets	5 00
16	W. B. Moses & Son	Curtain, &c	9 25
16	John J. Chew	Administering oaths	1 00
20	V. G. Fischer	Stationery	10 60
20	....do	Boxwood ruler, &c	5 00
20	....do	Rubber dies	2 00
20	....do	Shipman's files, &c	7 55
20	Browning & Middleton	50 cakes soap	2 75
21	F. B. Conger	25 special-delivery stamps	2 50
22	V. G. Fischer	Stationery	4 10
22	....do	....do	8 25
22	J. Baumgarten	Self-inking pads	1 50
8	William H. Boyd	Directory	5 00
18	American Shipmasters' Association.	1 copy Record of Shipping	15 00
22	E. W. Woodruff	1 dozen file-holders]	9 90
23	V. G. Fischer	Stationery	2 95

No. 1.—*Contingent expenses, Navy Department,* 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
1886.			
Jan. 23	William Ballantyne & Son	Stationery	$7 90
25	William F. Lutz	Stamps	3 00
25	Evening Post	Subscription	9 00
26	H. Baumgarten	2 dies for stamps	2 00
27	F. A. Schmidt	Ink and pencil erasers	2 55
28	T. K. Sailer	Administering oaths	3 00
28	F. A. Schmidt	Penholders and rulers	1 28
28	E. Morrison	Rubber bands	6 33
29	John F. Spelshouse	Frame bronze	4 25
29	T. K. Sailer	Administering oaths	5 50
29	S. H. P. Dyer	Translating notices to mariners	23 49
30	Army and Navy Journal	Subscription	6 00
30	J. W. Boteler & Son	Brooms, dusters, &c	9 75
30	J. J. Chapman	Ink	5 00
30	V. G. Fischer	Stationery	54 31
30	ditto	ditto	4 10
Feb. 1	ditto	Wrapping paper	8 50
1	Wyckoff, Seamans & Benedict	Remodeling type writer	35 00
1	ditto	Carbon paper	50
1	ditto	Remington type-writer	90 00
1	H. E. Bartle	Stamp	1 25
1	William Watson	Carting	50
2	V. G. Fischer	Wrapping paper	14 30
2	F. A. Schmidt	3 dozen pencils	1 41
2	Abram Jones	Glass	1 50
3	V. G. Fischer	Stationery	6 60
4	B. F. Peters	Hire of cab	75
4	William Ballantyne & Son	Stationery	1 44
5	James J. Chapman	ditto	18 37
5	V. G. Fischer	ditto	2 83
6	F. A. Schmidt	ditto	3 49
6	John C. Parker	Postal Guide	1 20
6	William Ballantyne & Son	Stationery	6 60
8	F. A. Schneider	Water-pail, brush, &c	2 75
8	E. Morrison	Stationery	18 04
8	Bailey & Davison	Copying machine and pads	36 50
8	John H. Magruder	Matches, &c	2 48
9	J. D. & E. S. Dana	2 vols. American Journal of Science, &c	6 75
9	V. G. Fischer	Stationery	16 95
10	Montgomery Sicard	Amount paid for herdic hire	1 25
10	William Ballantyne & Son	Stationery	18 34
10	George W. Knox	Transportation	1 50
10	G. G. Cornwell & Son	Dusters	13 00
10	William A. Wheeler, jr	Stationery	16 29
10	American Shipmasters' Association.	Record of American and foreign shipping	15 00
10	Benjamin White	Basin, &c	1 25
13	Wyckoff, Seamans & Benedict	Remodeling type-writer, and supplies	64 55
13	F. A. Schmidt	Stationery	3 67
15	William Ballantyne & Son	ditto	18 55
15	V. G. Fischer	ditto	38 53
17	William Ballantyne & Son	ditto	21 20
17	J. Baumgarten	Rubber die	2 50
17	Wyckoff, Seamans & Benedict	Type-writer supplies, &c	29 00
18	V. G. Fischer	Press-copy paper	96
18	D. A. Denison	Set of tools	2 00
18	William A. Wheeler, jr	Stationery	12 17
19	Adams Express Company	Freight	8 65
20	L. H. Hopkins	Basin and tumbler	85
20	Baltimore and Ohio Railroad Company.	Freight	70
23	Wyckoff, Seamans & Benedict	Type-writer supplies	2 30
23	George W. Knox	Hauling	1 00
24	B. W. Hanna	Hire of cab	50
25	S. G. Eberly	200 car-tickets	7 90
25	G. A. Whitaker	Scrap-book	2 50
26	John H. Magruder	1 gross matches	1 00
26	George W. Knox	Freight	76
26	M. J. Wine	108 file-boxes, and shelving	85 00
Mar. 1	John F. Stephenson	Freight, &c	5 57
1	James J. Chapman	Bristol board	24 50
2	C. F. Rabbitt	Repairing telegraph wire	2 00
2	W. R. McLean	Lumber	27 00
2	J. Baumgarten	Self-inking stamp	4 00
2	True & Carter's Express	Cartage	1 25
3	W. S. Thompson	1 dozen soap	2 00
3	Wyckoff, Seamans & Benedict	2 sets ribbon guides for type-writer	20
3	William Orme & Sons	Dusters, soap, &c	22 99
3	L. H. Hopkins	Hardware	20 00
4	John C. Parker	Postal Guide, &c	1 00

No. 1.—*Contingent expenses, Navy Department*, 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
1886.			
Mar. 4	S. J. Watts	Dusters, &c	$6 00
4	F. A. Schneider	..... do	4 45
4	John C. Parker	Postal Guide	1 60
4	Baltimore and Ohio Railroad Company.	Express charges	3 75
4	C. H. Middleton	Postage-stamps	5 00
5	W. H. Frost	Hauling	1 50
6	V. G. Fischer	Stationery	10 15
6	E. Morrison	Rubber bands	6 03
6	John H. Magruder	Matches	1 00
8	Adams Express Company	Expressage	11 15
8	William A. Wheeler, jr.	Stationery	5 30
8	James J. Chapman	Postal Guide	1 60
8	Wyckoff, Seamans & Benedict	Hektograph ribbons, &c	6 10
9	V. G. Fischer	Envelopes, &c	19 00
9	Appleton, Thompson & Co	Commercial and Shipping List	3 66
11	J. Baumgarten	Stamp pad	50
11	G. and C. Merriam & Co	Dictionary	8 00
11	Baltimore and Ohio Railroad Company.	Transportation	45
12	John F. Paret	1,000 engraved cards	10 00
13	V. G. Fischer	Stationery	25 80
18	F. B. Conger	Postage-stamps	148 50
18	S. H. P. Dyer	Translating notices to mariners	38 02
18	Carter, Dinsmore & Co	Ink	4 50
18	F. A. Schneider	Brush	1 25
19	William Norris	Gilding picture-frames	2 75
20	V. G. Fischer	Envelopes	22 68
20	Charles L. Hughes	Administering oaths	2 50
21	F. A. Schmidt	Ruler	65
22	W. H. Morrison	Law Review, U. S. Digest, &c	14 00
23	E. Morrison	Stationery	6 90
25	Ira Godfrey	Washing towels	26 69
25	F. A. Schmidt	Stationery, &c	6 20
26	George W. Knox	Freight	2 53
26	S. G. Eberly	200 street-car tickets	7 90
26	V. G. Fischer	Stationery	11 94
27	S. G. Eberly	500 street-car tickets	19 75
29	E. L. Lambie	6 Von Lace binders	6 00
31	Scott, Cromwell & Co	Soap and sponge	8 70
31	V. G. Fischer	1 dozen patent mucilage	3 00
Apr. 1	Easton & Rupp	2 dozen shipping-tags	20
2	Petersen & Childs	Gimp, mat, &c	5 80
2	Samuel G. Eberly	300 street-car tickets	11 85
2	William Ballantyne & Son	5,000 printed cards	13 00
2	.....do	5 reams note paper	10 50
3	William A. Wheeler, jr.	Stationery	8 70
3	E. Morrison	300 tubes, 19 by 2	7 50
3	E. L. Lambie	4 Congressional binders	5 00
3	William Norris	Gilding 4 picture-frames	2 75
5	E. M. Willis	Ice, three months	92 80
5	V. G. Fischer	Stationery	24 69
6	John F. Paret	.....do	20 50
6	Joseph D. Free, jr	.....do	6 50
6	Hyde & Co	Postage-stamp sticker	1 50
6	S. F. Ware	Cuttle-fish bone	50
6	Wyckoff, Seamans & Benedict	Type-writer ribbon, &c	2 00
6	L. H. Hopkins	Hardware, &c	3 32
7	George W. Porter	Subscription to Baltimore Journal of Commerce.	1 75
7	Wheatley Brothers	2,005 feet map rollers	25 06
7	V. G. Fischer	Stationery	95
10	James J. Chapman	Staple-press, &c	2 75
12	S. H. P. Dyer	Translating notices to mariners	39 77
13	W. Ballantyne & Son	Stationery	9 30
13	James J. Chapman	.....do	16 24
13	H. Baumgarten	Line stamp and pad	3 50
15	James B. Lambie	1 pair snips.	2 75
15	Woodward & Lothrop	3 dozen towels	9 00
16	George W. Knox	Transportation	1 36
16	Adams Express Company	Freight	3 41
17	J. G. Weaver & Son	Making cases	15 00
18	E. Smith & Co	Card-basket	29
19	V. G. Fischer	Stationery	23 44
19	F. A. Schmidt	Lead pencils	2 75
20	Western Union Telegraph Co	Telegrams	95
22	James B. Lambie	Oil-stone	70
22	F. A. Schmidt	Pencils and rubbers	2 78
23	W. M. Bradley & Bro	Atlas	21 60
24	V. G. Fischer	Press copy-paper	4 80
29	H. Baumgarten	Rubber-stamp	2 00

Contingent expenses, Navy Department, 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
1886.			
Apr. 29	Browning & Middleton	Soap, &c	$3 40
29	V. G. Fischer	Envelopes	2 89
May 1	John J. Chew	Administering oaths	2 50
1	William A. Wheeler, jr	10 pounds gum arabic	3 50
1	L. H. Hopkins	Hardware	18 18
4	C. F. Rabbitt	Repairing telegraph wire	2 00
4	V. G. Fischer	Stationery	6 28
5	E. Morrison	Rubber bands	1 36
8	B. W. Hanna	Hire of cab	75
10	M. W. Beveridge	Wash-stand, &c	2 85
11	S. H. P. Dyer	Translating notices to mariners	37 87
11	V. G. Fischer	5 dozen sheets for letter-press	5 00
12	Elphonzo Young's Co	2 gross safety matches	1 50
12	Adams Express Company	Expressage	13 65
12	V. G. Fischer	Stationery	16 76
13	William A. Wheeler, jr	------do	31 50
13	Fred. A. Schmidt	------do	3 35
13	M. E. Mann	Cyclopedia	7 00
13	E. Morrison	1 case (170) W. C. rolls	12 00
14	N. W. Burchell	Soap	3 72
15	V. G. Fischer	Stationery	101 13
17	Wyckoff, Seamans & Benedict	2 paper-stops for type-writer, &c	1 60
17	Baltimore and Ohio Railroad Company.	Expressage	75
18	F. A. Schneider	Floor-mops, buckets, &c	3 35
18	W. B. Moses & Son	Chair and Table	33 00
18	J. Lansburgh	Holland shades	15 90
18	M. E. Mann	Cyclopedia	7 00
18	V. G. Fischer	Stationery	2 85
19	F. A. Schmidt	Pencils	68
20	W. F. Lutz	4 dates for dating stamp	2 50
20	W. S. Thompson	1 dozen toilet soap	2 25
21	E. W. Woodruff	½ dozen file-holders	5 17
21	V. G. Fischer	Stationery	9 90
22	------do	------do	22 70
22	------do	------do	10 45
22	H. L. Pelouze	Lye brush, &c	6 55
25	C. F. Rabbitt	Repairing telegraph wire	4 00
26	William A. Wheeler, jr	2 dozen quarts mucilage	7 20
27	V. G. Fischer	Stationery, &c	16 80
29	E. W. Woodruff	File-holders	21 60
June 4	Adams Express Company	Transportation	55
5	E. G. Davis	6 dozen towels	18 00
5	F. A. Schmidt	Stationery	11 62
5	William Ballantyne & Son	Note paper	2 20
7	G. G. Cornwell & Son	1 dozen Pear's soap	1 75
4	George Cartner	Encyclopedia	6 00
7	United Lines Telegraph Company.	Telegram	16
8	L. H. Hopkins	Hardware	10 11
9	V. G. Fischer	Stationery	10 15
10	H. L. Pelouze & Son	Cabinet, tables, &c	60 65
11	V. G. Fischer	Stationery	26 17
11	Adams Express Company	Freight	1 10
11	John F. Paret	Cyclostyle	15 00
11	William Ballantyne & Son	Stationery	2 88
12	William A. Wheeler, jr	India ink	2 25
12	Royce & Marean	6 Leclanche zincs, &c	5 10
12	H. O. Towles	Putting seat in sofa, &c	31 00
12	W. S. Thompson	Drugs	4 25
12	V. G. Fischer	Stationery	5 11
14	Stephenson's Express	Freight	52
18	V. G. Fischer	Envelopes	2 19
18	William Ballantyne & Son	Note paper	5 91
18	N. W. Burchell	Soap and sponge	1 22
19	E. W. Woodruff	File-holders	18 75
20	H. Baumgarten	One rubber stamp	50
20	Joseph Waters	Six spools cotton	30
21	V. G. Fischer	Stationery	5 10
21	Hoole Manufacturing Company	Type	10 84
21	George Ryneal, jr	Alcohol, &c	17 49
22	J. Baumgarten	Dye for self-inking stamp	3 00
22	V. G. Fischer	Fountain pen, &c	5 65
23	W. F. Lutz	Ribbons for stamps, &c	2 90
23	C. H. Middleton	100 postage stamps, &c	5 00
24	J. F. Sanner	Shelving	60 00
24	Chesapeake and Potomac Telephone Company	Repairing telegraph wire	2 00
24	W. H. Morrison	Law Reviews, Digest, &c	38 00
24	J. W. Boteler & Son	Water-buckets, &c	6 00

No. 1.—*Contingent expenses, Navy Department*, 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
1886.			
June 24	J. G. Weaver & Son	Five packing-boxes	$12 50
24	V. G. Fischer	Stationery	8 13
25	J. H. Magruder	Whist-brooms	1 80
25	E. Morrison	2,000 bond envelopes, rubber bands, &c	24 56
25	George Cartner	Encyclopedia	7 00
25	R. H. Evans	Type-writer plate	1 00
25	Brentano Bros	One copy Hazen	2 50
26	Woodward & Lothrop	One dozen towels	3 00
26	Wyckoff, Seamans & Benedict	Remodeling type-writer and supplies	43 60
26	Petersen & Childs	Matting, &c	52 08
28	V. G. Fischer	Stationery	12 30
29	Petersen & Childs	Matting	91 17
29	William Ballantyne & Son	Stationery	34 96
29	W. B. Moses & Son	Matting	18 00
29	Meade Holladay	Removing books	9 75
28	J. J. Chew	Administering oaths	7 00
29	F. B. Conger	Postage-stamps	50 00
29	R 'B. Bare	300 street-car tickets	11 85
29	The World	1 year's subscription	7 50
30	Wyckoff, Seamans & Benedict	2 type-writers and cabinets	220 75
30	W. W. Payne	Books	7 20
30	W. S. Thompson	Soap	2 00
30	V. G. Fischer	Stationery	12 07
30	J. L. Harmon	Subscription to National Republican	3 00
30	Wm. Ballantyne & Son	Directories and stationery	16 00
30	J. L. Harmon	Subscription to National Republican	3 05
30	N. T. Metzger & Bro	Large feather duster	1 75
30	E. M. Willis	Ice to June 30	116 23

Supplemental to June 30, 1886.

July 1	H. L. Pelouze & Son	12 pounds lead	$2 40
2	L. H Hopkins	Hardware	17 25
2	Baltimore and Ohio Railroad Company.	Transportation	1 05
3	L. H. Hopkins	Hardware, &c	1 35
3	Seaton Perry	4 packing-boxes	1 00
3	J. G. Weaver & Son	3 packing-boxes	7 50
3	F. A. Belt	Lumber	23 31
3	John Shaefer	Imposing table, 2-inch marble slabs	20 00
6	F. A. Schmidt	Pencils, &c	8 88
6	Petersen & Childs	Matting	28 86
7	Joseph I. Keefe	Soap	2 66
7	Adams Express Company	Transportation	3 65
7	William W. Farr	Winding and care of clocks one year	6 00
7	Petersen & Childs	Matting	49 88
8	N. Anderson	Repairing curtains and cases	31 75
8	W. R. Brown	Matches, brooms, &c	3 70
8	A. C. & G. H. Demonet	Soap	4 60
8	Joseph & J. E. Libbey	Lumber	4 62
9	Woodward and Lothrop	1 dozen towels	3 00
10	V. G. Fisher	Directory, &c	7 00
10	William A. Wheeler, jr	Erasers, &c	5 93
12	V. G. Fisher	Cyclostyle, &c	13 50
12	Wyckoff, Seamans & Benedict	Type-writer supplies	2 90
13	Adams Express Company	Transportation	40
14	S. H. P. Dyer	Translating Notices to Mariners	33 19
14	William Ballantyne & Son	Directories	11 25
14	William F. Lutz	Repairing stamp, &c	3 50
14	William W. Farr	Care of clocks	114 00
15	George Cartner	Encyclopedia	6 00
16	Baltimore & Ohio Railroad Company.	Transportation	1 80
17	Ira Godfrey	Washing towels	29 63
16	O. Stone	Annals of Mathematics	2 00
21	J. W. Boteler & Son	Bucket, ice-pick, &c	2 00
20	William Orme & Son	Feather dusters, &c	7 80
23	H. Baumgarten	Repairing and making stamps	3 75
29	F. A. Schneider	Brooms, &c	2 40
29	E. W. Woodruff	File-holders	37 21
30	Baltimore & Ohio Railroad Company.	Transportation	75
30	W. B. Moses & Son	Large leather sofa, tables, &c	148 10
31	Petersen & Childs	Matting	21 30
Aug. 3	George Ryneal, jr	Alcohol, &c	7 80
12	Royce & Marean	Recharging electric-bell battery	1 25

No. 1.—*Contingent expenses, Navy Department*, 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
1886.			
Nov. 14	J. Baumgarten	Gardner clock, &c	$27 30
17	Washington Law Reporter	Subscription one year	3 00
21	Ira Godfrey	Wasning towels	21 46
31	M. J. Wine	File-case	35 00
Sept. 3	N. D. C. Hodges	73 numbers of Science	7 00
Nov. 23	Charles Scribner & Sons	1 copy "Blockade and Cruisers"	70
29	Army and Navy Register	Subscription one year	3 00
	Total		10,882 53

No. 2.—*Contingent and miscellaneous expenses, Hydrographic Office*, 1886.

Date.	To whom paid.	For what purpose.	Amount.
	Expenditures under subdivision Contingent and miscellaneous.		
1885.			
July 29	Norris Peters	Photolithographing	$85 00
31	R. H. Gaskins	Shading border on plates	50 00
31	do	Engraving, &c	35 00
31	H. E. Gasch	Removing defects from plates	50 00
31	A. C. Roberts	Partially preparing for engraving charts	76 00
Aug. 1	Fred. A. Schmidt	2 dozen sheets gelatine	8 00
6	J. C. Addison	1 bale of cotton	91 28
7	C. T. Klakring	Engraving seal, &c	23 72
15	W. F. Walker	Engraving lettering on chart	279 92
17	V. G. Fischer	Stationery	12 75
17	George B. Sharp	Copper plates	297 44
18	Fauth & Co	Repairing ruling-machine	28 00
21	L. E. Smillie	Photographing	20 50
25	George Ryneal, jr	3 roulettes	5 25
25	R. F. Bartle	Engraving	211 30
27	Bureau Engraving and Printing	75 pounds plate-ink	37 50
27	George B. Sharp	Copper plate	79 70
28	C. T. Klakring	Engraving	70 75
29	George Koch	First payment on "gnomonic chart"	600 00
31	R. F. Bartle	Engraving plate	757 00
Sept. 2	H. Howe	Freight and charges	7 19
4	James M. Wilcox & Co	Chart-paper, &c	336 13
4	F. L. Altemus	Arranging data on chart	15 00
4	R. H. Gaskins	Tinting, &c., on plates	50 00
4	A. C. Roberts	Preparing charts for engraving	100 00
4	H. E. Gasch	Partial tinting of charts	50 00
4	E. A. Reubsam	Engraving	60 00
12	Norris Peters	Photolithographing, &c	205 72
14	H. C. Evans	Engraving	243 50
14	G. Court	Constructing, &c., index charts	150 00
15	Norris Peters	Photolithographing, &c	273 00
15	William Kirkus, jr	Constructing chart	300 00
15	S. J. Kubel	Engraving	221 55
16	H. C. Evans	Additional engraving on plate	75 00
16	F. A. Ringler & Co	1 alto and 1 basso of plate	193 55
16	do	1 basso and 1 alto of metro	235 53
16	George B. Sharp	1 copper plate	75 33
Oct. 5	Browning & Middleton	Dusters and brushes	4 13
2	John Christman	Turning printers' rollers	75
6	Norris Peters	Photolithographing, &c	273 00
7	Joseph Enthoffer	Partial payment for engraving chart No. 961	500 00
7	E. A. Reubsam	Engraving lettering on chart	85 52
9	Fred. A. Schmidt	1 case drawing-ink	6 50
9	Bureau Engraving and Printing	Plate, ink, and oil	59 50
10	Bell Bros	Photolithographing, &c	50 00
10	E. A. Reubsam	Engraving lettering on chart	95 89
12	A. C. Roberts	Partial preparation of charts Nos. 1000 and 1002	100 00
14	Haughwont Howe	Freight and charges on charts	50 46
15	R. H. Gaskins	Tinting &c., chart-plate	20 00
15	C. T. Klakring	Engraving lettering on chart	132 35
17	V. G. Fischer	India ink	7 58
Oct. 19	H. E. Gasch	Tinting, &c., chart plate	50 00
22	Z. D. Gilman	Sponges, benzine, &c	29 95
22	R. F. Bartle	Engraving chart	683 00
31	S. J. Kubel	First payment for partial engraving chart No. 965	200 00
31	F. L. Altemus	Arranging data for pilot chart	20 00
Nov. 6	George B. Sharp	Copper plate	87 72

No. 2.—*Contingent and miscellaneous expenses, Hydrographic Office,* 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
	Expenditures under subdivision Contingent and miscellaneous—Continued.		
1885.			
Nov. 7	Norris Peters	Photolithographing, &c	$273 00
10	H. E. Gasch	Repairing plate, &c	25 00
10	R. H. Gaskins	Tinting plates	40 00
10	A. C. Roberts	Partial preparation of chart	100 00
11	James J. Chapman	Triangles, protractor, &c	10 15
11	Joseph Enthoffer	Engraving chart plate	138 00
11	Woodward & Lothrop	2,594¾ yards cheese cloth	90 82
11	E. A. Reubsam	Partial payment for engraving lettering on chart.	80 00
13	W. M. Dougal	Engraving chart plate	755 00
19	R. F. Bartle	Partial engraving chart plate	350 00
24	O. J. Stuart	Engraving lettering on chart	31 70
27	James B. Cox	Engraving soundings, &c	64 00
30	W. A. Dougal	Engraving chart	427 85
Dec. 3	F. L. Altemus	Arranging data for chart	30 00
3	A. C. Roberts	Partial drawing of charts	100 00
3	R. H. Gaskins	Partial preparation of plates, &c	50 00
3	H. E. Gasch	Tinting plates	50 00
3	James Parker	Cleaning copper plates	18 00
4	E. A. Reubsam	Engraving	136 50
8	W. H. Dougal	..... do	500 00
8	Norris Peters	Photolithographing, &c	268 00
14	Bureau Engraving and Printing.	75 pounds black ink	37 50
16	Fred. A. Schmidt	10 hard rubber splines	3 80
17	S. J. Kuble	Partial engraving of chart	350 00
19	H. C. Evans	Engraving chart	110 00
23	W. F. Walker	Engraving lettering	125 00
24	H. T. Knight	.....do	150 00
26	James Parker	Cleaning plates	27 00
26	Norris Peters	Photolithographing, &c	200 00
26	Peter A. Frasse & Co	Scotch stone	2 80
28	H. C. Evans	Engraving	550 00
1886.			
Jan. 2	F. L. Altemus	Arranging data for chart	30 00
2	A. C. Roberts	Engraving chart	100 00
2	R. H. Gaskins	Tinting chart, &c	50 00
2	H. E. Gasch	.....do	50 00
4	Z. D. Gilman	Oil, &c	16 40
7	V. G. Fischer	Stationery	1 80
8	Norris Peters	Photolithographing, &c	268 00
9	F. A. Ringler & Co.	2 altos and 2 bassos	715 86
12	W. M. Dougal	Engraving chart	130 00
15	Joseph Enthoffer	..... do	400 00
15	F. A. Schneider	Flat files, &c	2 30
16	F. A. Ringler & Co	1 alto and 1 basso	246 73
18	C. T. Klakring	Engraving extra lettering on chart plate	9 92
18	.....do	.....do	105 75
18	F. A. Ringler & Co	1 alto and 1 basso, &c	284 10
Jan. 29	Woodward & Lothrop	58½ yards muslin	2 93
29	S. H. P. Dyer	Translating data for chart	16 32
30	V. G. Fischer	24 sheets gelatine	8 40
Feb. 2	H. C. Evans	Engraving chart plate No. 947	422 00
2	.....do	Engraving chart plate No. 969	380 00
2	F. L. Altemus	Arranging data for chart	30 00
3	George B. Sharp	6 brass dies	3 60
3	F. A. Ringler & Co	1 alto and 1 basso	191 92
5	George B. Sharp	2 pounds engraver's charcoal	10 00
5	Norris Peters	Photolithographing, &c	268 00
8	F. A. Ringler & Co	1 alto and 1 basso	326 36
8	Bureau Engraving and Printing.	75 pounds plate ink	37 50
8	R. H. Gaskins	Tinting charts	50 00
8	A. C. Roberts	Partial preparation of chart	100 00
8	S. J. Kubel	Lettering on chart plate	68 00
9	W. F. Walker	Final payment for lettering on chart plate	334 32
9	H. T. Knight	.....do	114 65
10	H. E. Gasch	Partial tinting charts, &c	50 00
15	H. T. Knight	Engraving lettering on chart plate	259 45
16	S. J. Kubel	Partial engraving of plates	200 00
19	W. H. Dougal	.....do	300 00
Mar. 1	H. C. Evans	Additional engraving on plate	79 76
2	S. J. Kubel	Second and final payment for engraving chart-plate.	68 75
2	F. L. Altemus	Arranging data on chart	30 00
4	H. E. Gasch	Partial tinting of charts, &c	43 75
4	R. H. Gaskins	Tinting plate, &c	50 00
Mch. 5	Norris Peters	Photolithographing, &c	268 00
8	George Shilling	Repairing ruling machine, &c	75 00

No. 2.—*Contingent and miscellaneous expenses, Hydrographic Office,* 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
	Expenditures under subdivision Contingent and miscellaneous —Continued.		
1886.			
Mar. 9	Legge Bros. & Co	Transferring to copper plate chart No. 978	$33 24
10	O. J. Stuart	Engraving lettering on chart No. 966	210 00
11	R. G. Campbell	Stove for printing department	4 50
31	F. L. Altemus	Arranging data on pilot chart	30 00
Apr. 1	R. H. Gaskins	Partial tinting of plate	40 00
2	A. C. Roberts	Partial drafting of charts	70 00
7	Norris Peters	Photolithographing, &c	268 00
8	Washington Gas-Light Company.	Gas	16 65
8	H. E. Gasch	Partial tinting of plates	40 00
8	Bureau of Engraving and Printing	75 pounds of plate ink	37 50
9	F. A. Ringler & Co	Matrix and plates	402 90
16	C. T. Klakring	Partial payment for lettering on plate No. 931	100 00
27	George C. Howard	1 7-8 pitch spur wheel	3 00
May 4	S. J. Kubel	Electrotyping plate	65 00
4	F. L. Altemus	Arranging data on chart	30 00
4	Washington Gas-Light Company.	Gas	16 20
5	Norris Peters	Photolithographing, &c	268 00
7	A. C. Roberts	Partial preparation of chart No. 1012	60 00
8	Bureau of Engraving and Printing.	75 pounds of plate ink	37 50
8	F. A. Schneider	Sheet zinc	1 71
June 4	Z. D. Gilman	Alcohol, &c	20 80
4	F. L. Altemus	Arranging data on chart	30 00
10	Bureau of Engraving and Printing.	75 pounds plate-ink	37 50
11	Norris Peters	Photolithographing, &c	268 00
11	Washington Gas-Light Company.	Gas	12 90
23	A. C. Roberts	Constructing map, &c	190 00
26	F. A. Schmidt	10 sheets gelatine	3 33
26	....do	3 yards drawing paper	4 20
30	F. L. Altemus	Arranging data for chart	20 00
July 3	Washington Gas-Light Company.	Gas	11 85
6	Norris Peters	Photolithographing, &c	268 00
14	A. C. Roberts	Partial payment of charts Nos. 1015 and 1016	100 00
19	C. T. Klakring	Partial lettering on plate No. 931	75 00
27	H. T. Knight	Lettering on plate No. 970	252 90
Aug. 3	Z. D. Gilman	30 gallons benzine	4 50
7	Bureau of Engraving and Printing.	75 pounds ink	37 50
20	H. C. Evans	Engraving plate No. 966	169 00
	Expenditures under subdivision Rent of rooms, &c.		
1885.			
Aug. 18	Washington Gas-Light Company.	Gas	7 20
19	H. M. McKean	Rent of building for July	75 00
Sept. 7	....do	Rent of building for August	75 00
17	Washington Gas-Light Company.	Gas	7 95
30	H. M. McKean	Rent of building for September	75 00
Oct. 3	Chesapeake and Potomac Telephone Company.	Exchange rental	20 00
26	Washington Gas-Light Company.	Gas	5 70
Nov. 6	H. M. McKean	Rent of building for October	75 00
6	Washington Gas-Light Company.	Gas	16 95
19	Stephenson & Bro	Coal	28 50
Dec. 4	Abraham Jones	Relettering 2 signs	6 00
7	H. M. McKean	Rent of building for November	75 00
11	C. G. Schneider	Putting in flexible speaking-tube, &c	9 00
16	Washington Gas-Light Company.	Gas	14 70
19	James O'Hagan	Repairing water-pipes	44 85
1886.			
Jan. 5	H. M. McKean	Rent of building for December, 1885	75 00
7	Stephenson & Bro	5 tons of coal	28 50
7	Chesapeake and Potomac Telephone Company.	Exchange rental	21 60
12	Washington Gas-Light Company.	Gas	13 35

No. 2.—*Contingent and miscellaneous expenses, Hydrographic Office*, 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
	Expenditures under subdivision Rent of rooms, &c.—Continued.		
1886.			
Jan. 15	Edward Caverly & Co	Repairing water-closet	$2 75
Feb. 4	Washington Gas-Light Company.	Gas	12 60
5	H. M. McKean	Rent of building for January	75 00
24	Sephenson & Bro	5 tons coal	28 50
Mar. 3	Edward Caverly & Co	Repairing water-pipes	4 65
3	H. M. McKean	Rent for February	75 00
5	Washington Gas-Light Company.	Gas	15 15
Apr. 1	H. M. McKean	Rent for March	75 00
May 4	....do	Rent for April	75 00
June 5	....do	Rent for May	75 00
July 3	....do	Rent for June	75 00
	Expenditures under subdivision Branch offices.		
1885.			
July 30	McWilliams Printing Company	Subscription	19 00
30	M. U. Bates & Co	Printing	9 00
Aug. 6	Edward J. Faure	Care of office	50 00
6	Noah Smeat	Car-fare, &c	5 00
6	C. H. Schaub	Care of office	12 00
12	S. L. Graham	Ice, stationery, &c	6 55
12	L. Lacombe	Painting, &c	17 50
18	H. H. Barroll	Care of office, &c	2 54
18	L. M. Lee	....do	8 00
18	Klipper, Webster & Co	Furniture, &c	22 75
24	J. B. Milton	Car-fare	3 00
24	John R. Needham	Office cards, &c	7 00
Sept. 4	Edward Lindig	Cleaning, &c	4 00
4	R. D. J. Davison	Chart table	9 50
16	Thomas McQuade	Collecting data for Pilot Chart	54 75
16	S. L. Graham	Car-fare, &c	5 20
16	C. H. Schaub	Care of office, &c	12 00
16	Noah Smeak	Services in attending time-ball	5 00
16	A. B. Wyckoff	Car-fare, &c	4 76
16	L. M. Lee	Care of office	8 00
17	J. B. Milton	Car-fare	1 90
18	E. Stabler, jr., & Co	Coal	18 75
21	Edward J. Faure	Care of office, &c	50 00
21	G. Winneberger & Son	Desk	64 50
22	Edward Lindig	Cleaning, &c	4 00
Oct. 6	L. M Lee	Care of office	8 00
6	W. A. Marshall	Car-fare, postage, &c	8 42
6	Noah Smeat	Attendance on time-ball	5 00
6	S. L. Graham	Car-fare, ice, &c	8 55
6	C. H. Schaub	Care of office	12 00
6	Thomas McQuade	Collecting data for Pilot Chart	60 00
10	Edward Lindig	Cleaning office	4 00
10	J. B. Milton	Car fare, &c	2 85
10	A. B. Wyckoff	....do	2 81
10	E. J. Faure	Messenger service, collecting data	50 00
10	George W. Perry	Plumbing	2 48
16	Edgar Parker	Rubber stamp	2 50
21	California Electrical Works	Electrical apparatus	21 28
Nov. 3	Samuel S. Gay	One ream cap paper	5 00
6	L. M. Lee	Care of office	8 00
6	Thomas McQuade	Messenger service	60 00
6	Edward J. Faure	Care of office, &c	50 00
6	W. R. Wasson	Stationery	7 75
6	Edward J. Faure	Car-fare, &c	6 15
7	S. L. Graham	....do	6 85
7	C. H. Schaub	Care of office	12 00
7	Noah Smeat	Attending time-ball	5 00
9	Edward Lindig	Cleaning office	4 00
11	A. B. Wyckoff	Car-fare, &c	3 07
11	J. B. Milton	....do	4 20
11	James J. Chapman	1,600 shipping-tags	2 40
12	F. T. Bowles	6 bound copies Proceedings United States Naval Institute.	12 00
12	Unz & Co	Cards and stamp	5 75
12	B. J. Montgomery & Co	Cylinder secretary, &c	47 50
Dec. 1	Thomas McQuade	Messenger service	60 00
4	Edward Lindig	Cleaning, &c	4 00
4	A. B. Wyckoff	Car-fare, &c	4 15
4	L. M. Lee	Care of office	8 00
4	S. L. Graham	Car-fare, &c	5 10
4	C. H. Schaub	Care of office	12 00

No. 2.—*Contingent and miscellaneous expenses, Hydrographic Office*, 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
	Expenditures under subdivision Branch offices—Continued.		
1885.			
Dec. 4	F. H. Lefavor	Car-fare, &c	$2 90
4	E. J. Faure	Care of office, &c	50 00
4	Noah Smeak	Tending time-ball	5 00
5	L. La Combe	Making stand and locker for time-ball, &c	23 60
10	J. B. Milton	Car fare	7 35
17	C. A. Klinkner & Co	Painting time ball, &c	2 50
17	F. Krause	Frame and glass for screen, &c	90 50
18	Wyckoff, Seamans & Benedict	Type-writer	90 00
1886.			
Jan. 4	Thomas McQuade	Messenger service, &c	60 00
4	Edward Lindig	Care of office	4 00
4	E. J. Faure	Care of office, &c	50 00
4	F. H. Lefavor	Car fare, &c	2 00
4	L. M. Lee	Care of office	8 00
4	Noah Smeak	Attending time-ball	5 00
4	C. H. Schaub	Care of office	12 00
4	S. L. Graham	Ice, car fare, &c	8 10
7	V. G. Fischer	Dividers, &c	24 90
8	G. Winneberger & Son	Material for time-ball	6 00
8	A. B. Wyckoff	Car fare, &c	3 81
8	J. B. Milton	...do	5 85
9	H. V. Rowell	Type-writer	90 00
14	W. L. Field	Car fare, telegrams, &c	15 90
19	W. R. Wasson	Stationery	4 90
20	V. G. Fischer	Compass	7 00
Feb. 1	Thomas McQuade	Messenger service	60 00
1	James McGoldrich	...do	54 00
1	A. B. Wyckoff	Car fare, &c	6 25
1	Edward Lindig	Cleaning, &c	4 00
3	L. M. Lee	Messenger service	36 00
3	C. H. Schaub	Care of office	12 00
3	F. H. Lefavor	Car fare, &c	2 40
3	E. J. Faure	Messenger service, &c	50 00
3	S. L. Graham	Car fare, stationery, &c	6 50
3	Noah Smeak	Attending time-ball	5 00
6	W. A. Marshall	Car fare, ferriage, &c	7 12
9	Philadelphia Maritime Exchange.	Rent of office	25 00
9	J. E. McGown	Messenger service	40 00
10	J. B. Milton	Car fare	3 50
Mar. 1	Thomas McQuade	Messenger service	60 00
1	Edward Lindig	Cleaning, &c	4 00
1	A. B. Wyckoff	Car fare, cleaning, &c	5 61
1	James McGoldrick	Messenger service	60 00
3	Wyckoff, Seamans & Benedict	Four type-writers	340 00
3	L. M. Lee	Messenger service	60 00
3	F. H. Lefavor	Car fare and ferriage	2 10
3	Charles K. Suzenberg	Care of office, &c	50 00
4	C. H. Schaub	...do	12 00
4	Noah Smeak	Attending time-ball	5 00
4	S. L. Graham	Car fare, ferriage, &c	6 50
4	J. A. Foxcroft	Messenger service	46 00
6	J. Schultzbach	Time-ball detaching apparatus, &c	77 85
8	James J. Chapman	3,000 shipping-tags	4 50
9	John E. McGown	Messenger service	60 00
9	Unz & Co	Stationery	5 50
10	J. B. Milton	Car fare	3 30
10	E. R. Sharwood	Rent of office	25 00
18	V. G. Fischer	Stationery	34 70
24	William Ballantyne & Son	6 reams paper	13 20
Apr. 3	E. Morrison	Rubber bands	8 08
6	Thomas McQuade	Messenger service	60 00
6	L. M. Lee	...do	60 00
6	S. L. Graham	Car fare, ice, &c	6 90
6	Noah Smeak	Attending time-ball	5 00
6	C. H. Schaub	Care of office	12 00
6	John A. Foxcroft	Messenger service	60 00
6	E. Stabler, Jr., & Co	Wood and stowage	3 00
7	Edward Lindig	Cleaning, &c	4 00
12	Philadelphia Maritime Exchange.	Rent of office	25 00
12	John E. McGown	Messenger service	60 00
12	Charles K. Suzenberg	...do	60 00
12	J. B. Milton	Care fare	6 65
13	F. H. Lefavor	Car fare, &c	2 75
13	A. B. Wyckoff	...do	2 74
13	James McGoldrich	Messenger service	60 00
13	James J. Chapman	4 reams flat cap	14 00

No. 2.—*Contingent and miscellaneous expenses, Hydrographic Office,* 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
	Expenditures under subdivision Branch offices—Continued.		
1886.			
Apr. 20	Unz & Co	Ink	$3 35
May 4	L. M. Lee	Messenger service	60 00
4	Thomas McQuade	do	60 00
4	C. H. Schaub	Care of office	12 00
4	John A. Foxcroft	Messenger service	60 00
4	S. L. Graham	Car fare, &c	5 21
4	F. H. Lefavor	do	1 75
4	James McGoldrich	Messenger service	60 00
4	A. B. Wyckoff	Car fare, cleaning, &c	3 73
4	Edward Lindig	Cleaning, &c	4 00
4	Noah Smeak	Attending time-ball	5 00
4	Charles Suzenberg	Messenger service	60 00
4	California Electrical Works	Rent of office	25 00
5	Philadelphia Maritime Exchange.	Electrical apparatus	16 55
5	Dillon & Son	14 thermometers	6 30
8	Jno. E. McGown	Messenger service	60 00
8	J. B. Milton	Car fare	4 40
8	S. T. Gifford	Repairing barometer, &c	17 00
12	Woodward & Lothrop	184 yards cotton	9 20
June 1	Anderson Bros	Removing and splicing office-rails, hanging clock, &c.	11 85
17	Wyckoff, Seamans & Benedict.	Type-writer, &c	93 00
26	Royce & Marean	1 Gardner clock	33 00
4	Edward Lindig	Cleaning, &c	4 00
4	Thomas McQuade	Messenger service	60 00
11	L. M. Lee	do	60 00
11	John A. Foxcroft	do	60 00
11	A. B. Wyckoff	Car fare, &c	1 73
11	Noah Smeak	Attending time-ball	5 00
11	Chas. K. Suzenberg	Messenger service	60 00
11	C. H. Schaub	Care of office	12 00
11	S. L. Graham	Car fare, &c	5 55
11	Philadelphia Maritime Exchange.	Rent of office	25 00
11	Wm. Burns	Cleaning, &c	12 00
11	James McGoldrich	Messenger service	60 00
11	James J. Chapman	Bristol-board, &c	17 50
24	J. B. Milton	Car fare, &c	1 40
24	J. E. McGown	Messenger service	60 00
24	W. R. Wasson	Stationery, &c	8 55
24	William Ballantyne & Son	do	13 20
24	Leggat Bros	Dictionary	8 50
30	Bailey Manufacturing Company	Letter-press, &c	31 50
July 1	Charles K. Luzenberg	Car fare, &c	2 10
1	do	Messenger service, &c	62 15
2	Philadelphia Maritime Exchange.	Rent of office	25 00
2	James McGoldrich	Messenger service	60 00
2	A. B. Wyckoff	Car fare, &c	1 33
2	L. M. Lee	Messenger service	60 00
2	John Downs	Car fare, &c	6 50
2	William Burns	Cleaning office, &c	12 00
8	James J. Chapman	500 cards	2 59
9	Schneider & Fuchs	Mounting maps on rollers	4 00
9	Noah Smeak	Attending time-ball	5 00
9	John A. Foxcroft	Messenger service	60 00
9	S. L. Graham	Car fare, &c	5 15
9	V. L. Cottman	do	15 24
9	Thomas McQuade	Messenger service	60 00
9	Edward Lindig	Cleaning, &c	4 00
9	C. H. Schaub	Care of office	12 00
13	Royce & Marean	Linoleum, &c	29 40
13	A. Carlisle & Co	Stationery	7 80
13	John E. McGown	Messenger service	60 00
13	J. B. Milton	Car fare	2 50
23	Woodward, Wight & Co	Log line for halyards to time-ball	2 75
27	Bailey Manufacturing Company	Letter-press, stand, &c	52 25
27	R. S. Bowen & Co	Window awning	8 00
Aug. 9	Bailey Manufacturing Company	2 copying-machines, &c	69 00
	Total		28,396 22

RECAPITULATION.

Contingent and miscellaneous	$22,320 33
Rent of rooms, &c	1,187 95
Branch offices	4,887 94

No. 3.—*Contingent and miscellaneous expenses, Naval Observatory*, 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
	Expenditures under subdivision Miscellaneous computations.		
1885.			
July 30	William M. Brown, jr	Computations	$101 10
Aug. 31	do	do	101 10
Sept. 30	do	do	97 80
Oct. 31	do	do	101 10
Nov. 30	do	do	97 80
Dec. 31	do	do	101 10
1886.			
Jan. 30	do	do	103 30
Mar. 1	do	do	93 40
31	do	do	103 30
Apr. 30	do	do	98 90
May 31	do	do	102 20
June 30	do	do	98 90
	Expenditures under subdivision Purchase of apparatus, &c.		
1885.			
July 28	E. F. Brooks	150 feet hose	27 00
Aug. 18	Royce & Marean	Chemical apparatus, &c	89 48
28	J. F. Sanner	Sidereal clock case	23 00
Sept. 21	Royce & Marean	Electrical apparatus	33 73
23	Alvan Clarke & Sons	Two long focus 5-inch cases	80 00
26	Henry J. Green	Repairing barometer, &c	22 00
Oct. 2	Hayward & Hutchison	Four copper ventilators, &c	48 00
29	do	Repairing heating apparatus	164 85
29	Royce & Marean	Apparatus	87 10
Nov. 12	do	do	22 15
18	John A. Power	Lighting apparatus, &c	4 60
20	Thomas Somerville & Sons	Apparatus, &c	55 49
24	Royce & Marean	Battery wire, &c	11 68
1886.			
Jan. 5	John F. Paret	Cyclostyle	16 00
6	Joseph A. Santina	Labor and repairs on time-ball apparatus	30 00
9	J. F. Sanner	Repairing instrument, &c	42 30
21	J. R. Francis	Gas-governor, &c	85 00
26	Royce & Marean	Electrical apparatus	114 39
29	J. F. Sanner	Repairs to observing chair	18 74
Feb. 2	Royce & Marean	Furnishing and putting up time-ball line with connecting apparatus.	100 00
3	John A. Power	Washing and lighting apparatus for photographic house, &c.	130 28
16	Royce & Marean	Battery, &c	30 30
24	Henry J. Green	Thermometer	20 00
Mar. 11	E. J. Pullman	9 dozen Carbut's, 5 by 8, dry plates	14 65
30	Royce & Marean	Electrical apparatus, &c	109 20
Apr. 12	John A. Power	2 Bunsen burners, &c	3 94
27	Eastman Dry Plate and Film Company.	1 Prosch duplex shutter, &c	26 03
May 13	Royce & Marean	Electrical apparatus, &c	188 00
14	H. J. Green	Barometer, &c	124 00
June 12	Bailey Manufacturing Company	Letter-copying press, &c	43 25
24	Fauth & Co	Instruments	60 00
29	E. J. Pullman	4 dozen Carbut plates, &c	8 50
28	James B. Lambie	Hardware	23 00
29	J. Schultzbach	do	19 00
July 2	Royce & Marean	Electrical apparatus, &c	183 03
27	Hayward & Hutchison	Repairs to chronometer testing heating apparatus.	35 00
31	J. Schultzbach	2 electric contact attachments for clocks, with two brass sights.	31 25
	Expenditures under subdivision Professional books, &c.		
1885.			
Sept. 19	V. G. Fischer	Books	14 51
Nov. 3	B. Westermann & Co	do	275 16
6	do	do	114 59
19	V. G. Fischer	do	1 00
Dec. 24	do	do	1 00
1886.			
Jan. 4	J. M. Stoddart & Co	Book	4 50
4	James Anglim & Co	do	4 00
Feb. 13	do	do	5 00
15	B. Westermann & Co	Books	140 72
Mar. 4	John C. Parker	Postal Guide	1 60
May 6	J. M. Stoddart & Co	Encyclopedia	40 00
12	B. Westermann & Co	Books	337 19
14	M. E. Mann	Cyclopedia	7 00
June 8	J. M. Stoddart & Co	Book	4 50
July 1	B. Westermann & Co	Books	48 10

No. 3.—*Contingent and miscellaneous expenses, Naval Observatory*, 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
	Expenditures under subdivision Repairs of buildings, fuel, gas, furniture, stationery, &c.		
1885.			
July 13	Charles H. Raub & Co	3 sacks alum salt	$3 00
13	D. H. Richard	Sharpening picks, &c	2 10
16	V. G. Fischer	360 street-car tickets	15 00
17	R. C. M. Burton	4 window awnings	31 50
18	J. W. Kennedy & Co	Scythes, &c	13 14
21	Jno. W. Berryman	Repairing fences, &c	49 80
21	George Y. Hansell	Papering room	12 75
22	Richard Walze	Photograph (Admiral Franklin)	8 00
23	James C. Newton	Painting, glazing, &c	19 16
23	Patrick Grady	Frame for photograph	4 00
29	Wyckoff, Seamans & Benedict	Paper	13 60
Aug. 1	Brown & Lewis	4 dozen towels	12 00
1	Luttrell & Wine	60 yards black calico	4 20
5	William A. Wheeler, jr	Stationery	23 69
7	Harriet Thornton	Washing towels	3 67
11	Washington Gas-Light Company.	Gas	13 95
15	V. G. Fischer	Stationery	45 72
18	Royce & Marean	Chemicals	3 75
18	James B. Lambie	Hardware, &c	7 50
26	John Wells	50 loads manure, &c	44 50
28	J. F. Sanner	Putting up shelves, cases, &c	135 35
Sept. 14	Samuel Gray	Repairing house	52 50
16	P. R. Wilson	Oil, brooms, &c	38 98
16	J. W. Kennedy & Co	Twine, paint, &c	35 65
16	Adams Express Company	Expressage	3 90
17	Washington Gas-Light Company.	Gas	10 80
18	J. W. Kennedy & Co	Putty, lime, &c	7 45
18	James B. Lambie	Oil, locks, &c	9 73
19	V. H. Veerhoff	Papering rooms	25 00
19	E. F. Brooks	Chandelier, &c	13 85
19	V. G. Fischer	Stationery	15 38
29	....do	360 street-car tickets	15 00
30	Henry Lyles	10 loads sand	8 00
30	J. M. Dove	78 tons coal	353 60
Oct. 1	Paul Hiser & Sons	75 large flower-pots	4 75
2	Hayward & Hutchison	Repairing copper gutters	25 00
9	James C. Newton	Painting, &c	24 15
12	John Lamkin	Cleaning vaults	12 00
16	E. M. Willis	Ice	15 38
20	Henry Brown	Whitewashing	4 00
21	J. W. Kennedy	Glass, tacks, &c	4 15
22	Chesapeake and Potomac Telephone Company.	Exchange rental	25 00
22	Hayward & Hutchison	Repairing copper roof	20 25
22	George W. Knox	Hauling	4 00
26	W. B. Stoops	Lettering labels	3 60
26	Washington Gas-Light Company.	Gas	19 95
29	Royce & Marean	Bluestone	23 94
29	F. A. Schmidt	Stationery	6 23
31	V. G. Fischer	....do	39 76
Nov. 4	Elphonzo Youngs	Matches, &c	6 15
6	John Barr	Glazing, &c	17 00
9	Washington Gas-Light Company.	Gas	21 15
13	J. W. Kennedy & Co	Paint, hardware, &c	8 70
18	John A. Power	Repairing water-pipe, &c	33 56
16	E. F. Brooks	Globes for chandelier	4 96
19	V. G. Fischer	Stationery	3 18
23	Adams Express Company	Freight	3 65
24	Ira Godfrey	Washing towels	3 59
27	F. E. Harding	Erecting fence	55 00
28	James B. Lambie	Hardware, &c	3 50
30	James B. Haislup	Repairing chimneys, &c	27 50
Dec. 2	William Ballantyne & Son	Stationery	29 28
9	Hayward & Hutchison	Coal-hods, &c	7 35
9	William F. Downey	Transportation	1 50
14	J. M. Dove	Wood	5 50
14	Bureau Engraving and Printing.	5,220 impressions, printed from book-label plate.	26 10
16	Washington Gas-Light Company.	Gas	21 60
17	Charles H. Raub & Co	Brush, lime, &c	3 99
19	Thomas Barron	Repairing fences	49 77
24	V. G. Fischer	Stationery	5 83
26	James B. Lambie	Hardware, &c	5 76

No. 3.—*Contingent and miscellaneous expenses, Naval Observatory,* 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
	Expenditures under subdivision Repairs of buildings, fuel, gas, furniture, stationery, &c.—Continued.		
1885.			
Dec. 29	M. J. Wine	File-holders &c	$59 75
30	Fred. A. Schmidt	Pencils	9 10
30	John Wells	125 loads manure	106 25
30	Wyckoff, Seamans & Benedict	Repairs to type-writer	2 00
30	Washington and Georgetown Railroad Company.	360 street-car tickets	15 00
30	Washington City post-office	Postage-stamps	36 00
31	E. J. Pullman	Alum, potash, &c	14 64
1886.			
Jan. 5	John Lamkin	Cleaning vaults, &c	12 00
7	Chesapeake and Potomac Telephone Company.	Exchange rental	25 00
9	Singleton & Fletcher	Pamphlet-case	17 50
9	J. F. Sanner	Making case &c	32 65
11	William A. Wheeler, jr.	Mucilage	3 60
11	E. M. Willis	Ice	15 03
12	Washington Gas-Light Company.	Gas	39 90
12	E. Morrison	Stationery	12 00
13	V. G. Fischer	do	5 29
20	Wyckoff, Seamans & Benedict	Type-writing paper	5 50
20	William H. Boyd	Directory	5 00
20	Singleton & Fletcher	1 dozen chairs	20 00
22	Adams Express Company	Freight	12 10
23	James B. Lambie	Hardware, &c	5 49
25	V. G. Fischer	Stationery	10 00
28	J. W. Kennedy & Co	Hardware, &c	20 80
29	J. F. Sanner	Putting up new ceiling, &c	27 66
Feb. 3	John A. Power	Hydrant	12 00
4	Washington Gas-Light Company.	Gas	49 50
9	John Moran	Stove and fixtures	13 00
10	Joseph Mattingly	Reseating 3 chairs	2 25
11	P. N. Dwyer & Co	Glazed sashes	15 50
11	W. R. McLean	Lumber	19 20
13	James B. Lambie	Hardware, &c	12 57
13	John W. Berryman	Carting	12 18
15	B. Westermann & Co	Expressage on books	2 35
15	George W. Knox	Hauling	14 33
15	William Ballantyne & Son	2 reams regulation paper	5 30
Mch. 5	Washington Gas-Light Company.	Gas	53 85
11	E. J. Pullman	Soda, glycerine, &c	6 42
18	V. G. Fischer	Stationery	4 60
18	Singleton & Fletcher	1¾ yards felt	2 19
18	Campbell & Co	Hardware, &c	17 45
19	E. Morrison	Paper	3 90
19	J. L. Johnson	845 pounds straw	10 56
20	J. M. Dove	Pine wood	11 00
24	Luttrell & Wine	20 yards black cambric	1 40
24	John Wells	75 loads manure	56 25
24	Wash. B. Williams	2 office chairs	15 00
24	William Thompson	Repairing brick wall	25 00
25	Ira Godfrey	Washing towels	3 20
31	William A. Wheeler, jr.	Pens	12 60
Apl. 1	John Lamkin	Cleaning vaults	12 00
3	E. Morrison	1,000 cards	1 25
5	Allen Danforth	Announcements (17) of discoveries of comets and asteroids.	4 76
5	Chesapeake and Potomac Telephone Company.	Exchange rental	25 00
7	V. G. Fischer	Stationery	9 97
12	Washington Gas-Light Company.	Gas	52 50
12	John A. Power	Repairing and plumbing	46 08
12	Adams Express Company	Freight	6 10
10	Thomas Harrison	360 street-car tickets	15 00
15	E. Morrison	1,000 sheets paper	12 96
17	Hayward & Hutchison	Putting up grate	5 85
19	Wash. B. Williams	2 revolving chairs	15 00
19	F. E. Harding	Repairing roads, fences, &c	50 00
20	E. M. Willis	Ice	13 08
24	James B. Lambie	Hardware	14 37
24	P. R. Wilson	Oil, varnish, &c	14 93
24	John Wells	70 loads gravel	59 50
28	J. F. Sanner	Lumber, &c	31 93
May 7	William T. Fowler	Hauling	20 00

No. 3.—*Contingent and miscellaneous expenses, Naval Observatory,* 1886—Continued.

Date.	To whom paid.	For what purpose.	Amount.
	Expenditures under subdivision Repairs of buildings, fuel, gas, furniture, stationery, &c.—Continued.		
1886.			
May 7	Washington Gas-Light Company.	Gas	$44 25
8	Z. D. Gilman	20 pounds chloride calcium, &c	7 00
10	F. E. Harding	Repairing wall	115 00
12	Elphonzo Youngs Company	Soap, matches, &c	11 55
13	Royce & Marean	1 barrel blue-stone	23 73
13	Adams Express Company	Expressage	3 70
13	Thomas Barron	Repairing stone culvert, &c	24 00
17	George W. Knox	Hauling	3 50
29	V. G. Fischer	Stationery	8 20
June 1	G. Y. Hansell	Scraping, pointing, and papering four rooms	40 77
4	Z. D. Gilman	72 pounds acid, &c	6 75
4	P. R. Wilson	Hair brooms, &c	7 80
5	Washington Gas-Light Company.	Gas	37 20
5	James O'Donohue	Repairing water-pipes	30 00
11	James B. Lambie	Hardware, &c	7 93
24	Adams Express Company	Expressage	3 20
24	John Fox	Cutting grass, &c	47 00
24	J. W. Kennedy & Co	Hardware, &c	43 42
24	James B. Lambie	ditto	7 59
25	F. A. Schneider	Nails	12 25
25	Hayward & Hutchison	Fire-brick, &c	2 10
28	F. D. Evans	6 loads sand	4 50
30	H. E. Davidson	2,000 cards	4 20
30	Campbell & Co	Plaster, lime, &c	8 50
30	V. G. Fischer	Stationery	1 20
July 1	B. Westermann & Co	Expressage	1 30
1	James H. Byram	Repairing platform and steps	32 50
2	James B. Lambie	Hardware, &c	13 50
2	John Lamkin	Cleaning vaults	12 00
2	George Donohue	Repairing roads, fences, &c	50 00
3	James C. Newton	Painting, glazing, &c	155 65
7	George W. Knox	Hauling	3 00
7	Washington Gas-Light Company.	Gas	21 90
7	Chesapeake and Potomac Telephone Company.	Exchange rental	25 00
8	Adams Express Company	Expressage	8 15
12	Allen Danforth	Announcement of 10 discoveries of comets, &c	3 11
13	W. R. McLean	Lumber	64 72
15	E. M. Willis	Ice	20 20
17	Ira Godfrey	Washing towels	3 90
17	James B. Lambie	Oil, &c	3 25
31	Petersen & Childs	13 yards linoleum	13 00
Aug. 9	Western Union Telegraph Company.	Telegrams	2 28
12	Royce & Marean	250 pounds blue-stone, &c	21 50
21	Ira Godfrey	Washing towels	2 36
	Expenditures under subdivision Freight to Smithsonian Institution.		
Jan. 15	Smithsonian Institution	Freight charges	37 10
July 2	ditto	ditto	56 95
			8,317 66

RECAPITULATION.

Miscellaneous computations	$1,200 00
Purchase of apparatus, &c	2,124 94
Professional books, &c	998 87
Repairs to buildings, &c	3,899 80
Freight to Smithsonian Institution	94 05

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. Doc. No. 90.

LIGHT-HOUSE, CRAB TREE LEDGE, MAINE.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

A letter from the Light-House Board relative to the appropriation for a light-house at Crab Tree Ledge, Maine.

JANUARY 18, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 17, 1887.

SIR: I have the honor to transmit herewith a letter of the Light-House Board of the 16th instant, and its inclosure, in regard to the appropriation of $25,000, made in the sundry civil appropriation act, approved August 4, 1886, for establishing a light-house on Crab Tree Ledge, Maine, and stating that it now appears that so much of the ledge as obstructs commerce and makes the light-house necessary can be removed for less than half the amount above named.

The Board requests that action may be had with a view to making an appropriation of so much as may be necessay, say $10,000, for the removal of the obstruction, when the $25,000 appropriated for the erection of the light-house may be allowed to lapse into the Treasury.

I have accordingly respectfully to transmit these papers, so that action may be taken by Congress in the matter, if it appears wise to do so, agreeably to the desire of the Light-House Board.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

TREASURY DEPARTMENT,
OFFICE OF THE LIGHT-HOUSE BOARD,
Washington, January 13, 1887.

SIR: An appropriation of $25,000 was made in the sundry civil appropriation act approved August 4, 1886, for establishing a light-house on Crab Tree Ledge, Maine.

It now appears that so much of the ledge as obstructs commerce and makes the light-house necessary can be removed for less than half that amount.

The Board, at its session on January 11, 1887, directed that the attention of the Department be called to the matter, with the suggestion that the proper steps be taken to obtain an appropriation of so much as may be necessary, say $10,000, for the removal of the obstruction, when the $25,000 appropriated for the erection of a light-house to mark the obstruction may be allowed to lapse into the Treasury.

This matter is presented clearly in a letter of December 30, 1886, from the engineer of the first light-house district to the Board, and a copy of it is inclosed for your further information.

Very respectfully,

S. C. ROWAN,
Vice-Admiral, United States Navy, Chairman.

The SECRETARY OF THE TREASURY.

OFFICE OF LIGHT-HOUSE ENGINEER
FIRST AND SECOND DISTRICTS,
Boston, Mass., December 30, 1886.

SIR: I have the honor to report to the Board that, from a survey of Crab Tree Ledge, Frenchman's Bay, Hancock County, Maine, made preparatory to the erection of a light-house upon it pursuant to the clause appropriating $25,000 therefor in the act of Congress approved August 4, 1886, and instructions from the Board of August 26, 1886, it appears that there are in the ledge only about 400 cubic yards of rock above a plane 12 feet below mean low water. It is believed that the 400 cubic yards can be removed for $20 per cubic yard, amounting, with an allowance, say, of $2,000 for inspection, engineering, and contingent expenses, to $10,000.

As the greatest draught of water of steamers plying between Bar Harbor and the railroad terminus at Mount Desert Ferry is 10 feet, and as vessels cannot pass Sullivan's Falls in the river above at mean low tide drawing more than 7 feet of water, it is thought that the removal of the rock to the depth of 12 feet below mean low water would be adequate for safety.

The plans, specifications, and estimates for the light-house are in progress and will soon be submitted to the Board, but as the removal of the upper 4½ feet of the ledge, as above, would probably cost less than one-half the sum appropriated for the light-house, to say nothing of its subsequent maintenance and pay of keeper, this report is now submitted, that the Board may have time to take action, should it desire, with a view to legislation at the present session of Congress providing for the removal of a part of the ledge instead of erecting a light-house upon it.

Very respectfully, your obedient servant,

W. S. STANTON,
Major of Engineers, Engineer First and Second Light-House Districts.

The CHAIRMAN OF THE LIGHT-HOUSE BOARD,
Washington, D. C.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. DOC. No. 91.

LIGHT-HOUSE, SKILLIGALLEE, LAKE MICHIGAN.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

A letter from the Light-House Board, recommending an appropriation to rebuild the Skilligallee light-house tower, Lake Michigan.

JANUARY 19, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 18, 1887.

SIR: I have the honor to transmit herewith a letter of the Light-House Board, of the 14th instant, stating that the tower of the Skilligallee light-house, Michigan, which is built on a rock in Lake Michigan, 6 miles from land, is dangerously cracked and liable to fall at any time, so that it will be necessary to take it down, make a new foundation, and rebuild the entire structure, at an estimated cost of $8,000.

The Board states that for doing this and other work absolutely necessary the current appropriation for repairs of light-houses is insufficient, and asks that steps be taken with a view to securing an appropriation in the sum of $8,000, named above, for rebuilding the tower.

I have accordingly respectfully to transmit this communication, so that action may be taken by Congress in the matter, if it appears wise to do so, agreeably to the desire of the Light-House Board.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

TREASURY DEPARTMENT,
OFFICE OF THE LIGHT-HOUSE BOARD,
Washington, January 14, 1887.

SIR: The Light-House Board has the honor to state that the tower of the Skilligallee (Michigan) light-house, which was built in 1867, is dangerously cracked and liable to fall at any time, so that it will be

necessary to take it down, make a new foundation, and rebuild the entire structure.

This station is built on the Skilligallee Rock, in Lake Michigan, nearly 6 miles from the mainland, and the estimated cost of rebuilding the tower is $8,000.

For doing this and other work absolutely necessary, the current appropriation for repairs of light-houses is insufficient.

This matter was considered by the Board at its session held on January 11, 1887, when it was ordered that the proper steps be taken to have an appropriation of $8,000 made by Congress for rebuilding the tower of the light-station in question.

Recommendation is, therefore, respectfully made that Congress be asked to make an appropriation of $8,000 for rebuilding the tower of the Skilligallee, Lake Michigan, Light Station.

Very respectfully,

S. C. ROWAN,
Vice-Admiral, U. S. N., Chairman.

The SECRETARY OF THE TREASURY.

O

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 92.

LAKE PROVIDENCE REACH AND PILCHER'S POINT, MISSISSIPPI RIVER.

LETTER

FROM

THE SECRETARY OF WAR,

TRANSMITTING

Correspondence relative to the restriction, in the river and harbor act of August 5, 1886, of the appropriation for improvement of the Mississippi River at the Lake Providence Reach and Pilcher's Point.

JANUARY 19, 1887.—Referred to the Committee on Rivers and Harbors and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 18, 1887.

The Secretary of War has the honor to transmit to Congress copies of papers showing the approval by the Mississippi River Commission of the project of Capt. W. T. Rossell, Corps of Engineers, for the expenditure of $300,000 in the improvement of the Lake Providence Reach, including the repair of the revetment at Pilcher's Point; but, in view of the restrictions of the river and harbor act of August 5, 1886, respecting bank protection or revetment as a means of channel improvement, a question is raised in regard to the applicability of any part of the appropriation to the repairs at Pilcher's Point.

The subject of the restrictions referred to was embraced in a report, under date of the 27th of November last, of the Mississippi River Commission, which was transmitted to Congress on the 5th instant, and printed in House Executive Document No. 66, Forty-ninth Congress, second session. In that report the opinion is expressed that in most cases it is impossible to build permeable contracting works or secure any narrowing of the channel by them without holding the banks in their immediate neighhorhood while the work is going on, and that the attempt to improve the Mississippi River by contraction works alone would be a waste of public money.

The matter being one of great importance, these papers are transmitted for the information of the committee having charge of the improvement of the Mississippi River.

WM. C. ENDICOTT,
Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

LETTER OF THE CHIEF OF ENGINEERS.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., December 17, 1886.

SIR: Referring to your letter of December 7, inclosing requisition for funds from appropriation for improving Mississippi River, to be applied to levees on Tensas Front and to Lake Providence Reach, I am directed by the Chief of Engineers to reply, in regard to the Lake Providence item, that the project for the expenditure of the allotment for Lake Providence Reach has not been received from the Mississippi River Commission; and until it is approved by the Secretary of War it is not seen how this office can properly ask the Secretary of War to remit the funds asked.

By command of Brigadier-General Duane.

Very respectfully, your obedient servant,

JOHN G. PARKE,
Colonel of Engineers,
Bvt. Maj. Gen., U. S. A.

Capt. W. T. ROSSELL,
Corps of Engineers.

LETTER OF CAPTAIN WILLIAM T. ROSSELL, CORPS OF ENGINEERS.

UNITED STATES ENGINEER OFFICE,
IMPROVING MISSISSIPPI RIVER, THIRD DISTRICT,
Memphis, Tenn., December 21, 1886.

SIR: I have the honor to acknowledge receipt of your letter of the 17th instant, and, in justice to myself, I desire to state the reason for sending in my requisition for funds. It was based upon the following extract from the minutes of proceedings of the Mississippi River Commission, at its meeting of November 26 and 27, 1886, held at Saint Louis, Mo.:

MEMPHIS, TENN., *November* 17, 1886.

Col. Q. A. GILLMORE,
Corps of Engineers, U. S. A.,
President Mississippi River Commission,
Army Building, New York, N. Y.:

SIR: I have the honor to acknowledge the receipt of your letter of the 13th instant, informing me of the approval by the Honorable the Secretary of War of the allotment by the Mississippi River Commission of $300,000 for work of construction and repair to Lake Providence Reach.

I respectfully submit the following project for this work:

Repair of revetment at Pilcher's	$135,000 00
Repair of Cottonwood Dikes	25,000 00
Repair of Baleshed Dikes	27,000 00
Repair of floating plant	30,000 00
Deflecting dike above Lake Providence	20,000 00
Extending revetment below Pilcher's	40,000 00
Care of plant, survey, &c	23,000 00
Total	300,000 00

It will be necessary to do the work of repair to revetment at Pilcher's as rapidly as possible, as the length of time available for the work depends upon the time of the January rise. Should this project be approved, I would respectfully ask for authority to purchase brush, stone, and other supplies in open market, or to make contracts for the same without advertising.

The repair work on dikes cannot be done at the present stage of water, and it will be necessary to wait for a rise, but it would be advisable to make contracts for piles, stringers, &c., as soon as possible, to allow contractors to get these out at once, and avoid delay in delivery when work begins.

For Pilcher's, I would recommend sinking mats along the foot of the slope from 100 to 200 feet in width, connected with the old work, and where the old work has disappeared regrading and building new revetment.

In the Baleshed Dikes repairs to the breaks in cross-dikes 10, 11, and 13.

In the Cottonwood Dikes, repairs to main and cross Dikes.

The new work proposed is building a deflecting dike and extending the revetment at Pilcher's. The crossing at the lower end of Stack Island is the shoalest on the reach, and this dike will tend to throw the strength of the current along the crossing.

Extending the revetment at Pilcher's is in the direction of holding Louisiana Bend.

Only $40,000 is estimated for this work, not that it is enough, but that it is all that can be spared.

I would estimate approximately the amount of material required for this work as follows: 14,000 cords brush and poles, 12,000 cubic yards stone, 3,600 piles (half cypress), 1,800 longitudinal stringers, 2,400 cross-braces.

To carry on this work will require some 600 men.

I am, very respectfully, your obedient servant,

W. T. ROSSELL,
Captain of Engineers.

It was moved by Major Suter that the following project for the expenditure of the approved allotment of $300,000 for the Lake Providence Reach be adopted, viz: That this sum be expended in the repair of the revetment at Pilcher's; in the repair of the Cottonwood Dikes; in the repair of the Baleshed Dikes; in the repair of floating plant; in the construction of a dike or dikes at Lake Providence; in the extension of the revetment below Pilcher's, and for the care of plant and a survey of the reach; it being provided that before any work be done for the construction of dikes at Lake Providence, Captain Rossell, Corps of Engineers, in charge of the third district, shall furnish a map and sketches showing the location and illustrating the construction of the dike or dikes proposed at that place; it being further provided that, before any work shall be done on the repair of the Cottonwood Dikes Captain Rossell shall make a report stating the necessity for those repairs; and it being further provided that he shall be instructed in the repairs of the Baleshed Dikes not to repair the longitudinal dike. Carried.

Certainly here is approved by the Commission the project for the repair of the Pilcher's Point revetment, for survey, for care of plant, and for repair of Baleshed cross-dikes.

Further information is required before work is done on the Cottonwood Dikes and on the deflecting dike or dikes above Lake Providence.

Very respectfully, your obedient servant,

WM. T. ROSSELL,
Captain of Engineers.

The CHIEF OF ENGINEERS, U. S. ARMY.

[First indorsement.]

OFFICE CHIEF OF ENGINEERS,
U. S. ARMY,
December 28, 1886.

Respectfully referred to Col. Q. A. Gillmore, Corps of Engineers, President Mississippi River Commission, for his information.

Attention in this connection is invited to press copy of letter from this office to Captain Rossell, dated December 17, 1886, herewith.

To be returned.

By command of Brigadier-General Duane.

JOHN G. PARKE,
Colonel of Engineers,
Bvt. Maj Gen., U. S. A.

[Second indorsement.]

THE MISSISSIPPI RIVER COMMISSION,
PRESIDENT'S OFFICE,
New York, December 30, 1886.

Respectfully returned to the Chief of Engineers, U. S. Army, as directed.

The extracts from the proceedings of the Commission, furnished to this office immediately after the meeting of November 26, 27, 1886, did not include Captain Rossell's project, and no reference is made to it in their action. It is probable that the Commission intended to approve it, with the reservations specified, but no such intention appears on the record.

A partial project, however, has been since submitted by Captain Rossell for revetment of Pilcher's Bend. This has been recommended by the Commission and forwarded to the Secretary of War, with request for approval.

Q. A. GILLMORE,
Colonel of Engineers,
Bvt. Maj. Gen., U. S. A.,
Prest. Miss. River Com.

[First indorsement on copies of foregoing papers.]

OFFICE CHIEF OF ENGINEERS,
U. S. ARMY, *January* 10, 1887.

Respectfully submitted for the information of the Secretary of War, together with copies of letters from this office of December 17, 1886, and January 5, 1887.

In view of the requirements of the appropriation act respecting "bank protection or revetment," a question is raised as to the applicability of any part of the appropriation to the repairs at Pilcher's Point; and, owing to the great importance of the matter, it is respectfully suggested that these papers be transmitted to Congress for the information of the committees having charge of the improvement of the Mississippi River.

J. C. DUANE,
Brig. Gen., Chief of Engineers.

LETTER OF CAPTAIN WILLIAM T. ROSSELL, CORPS OF ENGINEERS.

UNITED STATES ENGINEER OFFICE,
IMPROVING MISSISSIPPI RIVER, THIRD DISTRICT,
Memphis, Tenn., December 21, 1886.

SIR: I have the honor to submit the following project for the repair work to Pilcher's Revetment, and to respectfully request that you will communicate your views on this subject to General Gillmore, President of the Mississippi River Commission.

I am not able at the present time to furnish drawings, and have only handed this project in, in the hope that I may be able to do some work this season.

During the past high water many breaks have occurred in the upper revetment and subaqueous portion of the bank protection in Louisiana Bend, known as the Pilcher's Point Revetment. The amount has been estimated at 50 to 60 per cent. of the whole work.

It is proposed to repair this, using exactly the same construction as was done in the previous work, unless it should seem advisable at places to increase the strength of the mattress.

The protection consists essentially of a mattress of willow brush bound and held together by willow poles and wire, the whole being held in place by riprap of stone. As bearing on this, I would refer to Plate IV, Appendix L, Report of Mississippi River Commission for 1882.

This is a sketch of revetment used at Delta Point, Louisiana, and is the general method followed at other places.

The breaks are irregularly distributed along the whole line previously revetted, and it is proposed to begin at the upper end and repair continuously down-stream to the end.

An approximate estimate of amount of material needed is as follows: 14,000 cords brush and poles and 12,000 cubic yards of stone.

Under the impression that the Commission had already approved this project, I have made contracts for 10,000 cords willow brush and 4,000 cords willow poles.

I have on hand about 4,000 cubic yards stone, and can, I believe, make a favorable contract for the rest.

Very respectfully, your obedient servant,

WM. T. ROSSELL,
Captain of Engineers.

Col. Q. A. GILLMORE,
Corps of Engineers,
President Mississippi River Commission.

LETTER OF THE PRESIDENT OF THE MISSISSIPPI RIVER COMMISSION.

THE MISSISSIPPI RIVER COMMISSION,
PRESIDENT'S OFFICE,
ARMY BUILDING, 33 W. HOUSTON STREET,
New York, December 30, 1886.

SIR: I have the honor to communicate the following action of the Mississippi River Commission, taken at their meeting of November 26 and 27, 1886:

That the following project for the expenditure of the approved allotment of $300,000 for the Lake Providence Reach be adopted, viz: That this sum be expended in the repair of the revetment at Pilcher's; in the repair of the Cottonwood Dikes; in the repair of the Baleshed Dikes; in the repair of floating plant; in the construction of a dike or dikes at Lake Providence; in the extension of the revetment below Pilcher's; and for the care of plant and a survey of the reach; it being provided that, before any work be done for the construction of dikes at Lake Providence, Captain Rossell, Corps of Engineers, in charge of the third district, shall furnish a map and sketches showing the location and illustrating the construction of the dike or dikes proposed at that place; it being further provided that, before any work shall be done on the repairs of the Cottonwood Dikes, Captain Rossell shall make a report stating the necessity for those repairs; and it being further provided that he shall be instructed, in the repairs of the Baleshed Dikes, not to repair the longitudinal dike.

As the above action is not, in my judgment, in sufficient detail to answer the requirements of the Department with respect to the approval of allotments, I have requested Captain Rossell, in charge of the third district, to furnish to the Commission a definite project for Lake Providence Reach, conforming to the above recommendations. In reply, a partial project, embracing the repairs of revetment at Pilcher's, has been submitted and has received the approval of six members of the Commission, one member not having as yet responded.

A copy of this project is inclosed with request for approval. The cost of the work is elsewhere estimated by Captain Rossell at $135,000.

Very respectfully, your obedient servant,

Q. A. GILLMORE,
Colonel of Engineers,
Bvt. Maj. Gen., U. S. A.,
Prest. Miss. River Com'n.

The SECRETARY OF WAR,
(Through the Chief of Engineers.)

LETTER OF THE CHIEF OF ENGINEERS.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., January 5, 1887.

SIR: Referring to your requisition for funds from the appropriation for improving Mississippi River, the Chief of Engineers directs me to say that no part of the money remitted you, should be applied to "bank protection or revetment," except at the points authorized by the act.

By command of Brigadier-General Duane.

Very respectfully, your obedient servant,

JOHN G. PARKE,
Colonel of Engineers,
Bvt. Maj. Gen., U. S. A.

Capt. WILLIAM T. ROSSELL,
Corps of Engineers.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. DOC. No. 93.

CUSTOMS REVENUE.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

Estimates of appropriations for defraying expense of collecting the revenue from customs for the fiscal year ending June 30, 1888.

JANUARY 20, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT,
January 13, 1887.

SIR: In accordance with the provisions of section 5 of the act approved August 5, 1882, entitled "An act making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ending June 30, 1883," I have the honor to transmit herewith estimates of appropriations for defraying the expenses of collecting the revenue from customs for the year ending June 30, 1888.

The attention of Congress is invited to the recommendations and statements made in the letter of this Department, under date of January 13, 1886, transmitting the estimates made for the year ending June 30, 1887.

Very respectfully,

D. MANNING,
Secretary.

Hon. JOHN G. CARLISLE,
Speaker of the House of Representatives.

Estimate of expenses of collecting revenue from customs for the fiscal year ending June 30, 1888, showing the number of employés and the salaries required for each collection district.

Designation.	No.	Per annum.	Aggregate.
MAINE.			
Port of Bangor, district of Bangor:			
Collector	1	$2,000 00	$2,000 00
Deputy collector and inspector	1	1,600 00	1,600 00
Do	1	1,400 00	1,400 00
Deputy collectors and inspectors	3	1,000 00	3,000 00
Inspectors	3	1,000 00	3,000 00
Total	9		11,000 00
Port of Bath, district of Bath:			
Collector	1	2,000 00	2,000 00
Deputy collector	1	1,400 00	1,400 00
Do	1	1,000 00	1,000 00
Do	1	800 00	800 00
Inspectors, weighers, &c	2	1,000 00	2,000 00
Inspectors	2	300 00	600 00
Total	8		7,800 00
Port of Belfast, district of Belfast:			
Collector	1	1,200 00	1,200 00
Deputy collectors and inspectors	2	1,000 00	2,000 00
Deputy collector and inspector	1	300 00	300 00
Do	1	200 00	200 00
Do	1	100 00	100 00
*Deputy collector, weigher, gauger, and measurer	1	800 00	400 00
Total	7		4,200 00
Port of Castine, district of Castine:			
Collector	1	1,000 00	1,000 00
Deputy collector and inspector	1	1,000 00	1,000 00
Do	1	1,000 00	1,000 00
Deputy collectors and inspectors	3	800 00	2,400 00
Total	6		5,400 00
Port of Eastport, district Passamaquoddy:			
Collector	1	2,000 00	2,000 00
Deputy collector and inspector	1	1,800 00	1,800 00
Do	1	1,400 00	1,400 00
Do	1	1,000 00	1,000 00
Do	1	900 00	900 00
Deputy collectors and inspectors	2	720 00	1,440 00
Inspectors	4	1,000 00	4,000 00
Do	3	900 00	2,700 00
Clerk	1	1,000 00	1,000 00
Watchmen	3	720 00	2,160 00
Total	18		18,400 00
Port of Ellsworth, district of Frenchman's Bay:			
Collector	1	1,200 00	1,200 00
Deputy collector and inspector	1	1,200 00	1,200 00
Deputy collectors and inspectors	2	1,000 00	2,000 00
Deputy collector and inspector	1	600 00	600 00
Do	1	18 25	18 25
Total	6		5,018 25
Port of Houlton, district of Aroostook:			
Collector	1	1,600 00	1,600 00
Deputy collector and inspector	1	1,400 00	1,400 00
Deputy collectors and inspectors	6	1,000 00	6,000 00
Total	8		9,000 00
Port of Kennebunk, district of Kennebunk:			
Collector	1	250 00	250 00
Port of Machias, district of Machias:			
Collector	1	1,200 00	1,200 00
Deputy collector and inspector	1	1,000 00	1,000 00
Do	1	400 00	400 00
Do	1	300 00	300 00
Total	4		2,900 00

*To serve six months.

Estimate of expenses of collecting the revenues from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
MAINE—continued.			
Port of Portland, district of Portland and Falmouth:			
Collector	1	$4,000 00	$4,000 00
Deputy collector	1	2,500 00	2,500 00
Deputy collectors and inspectors	2	1,800 00	3,600 00
Do	2	1,000 00	2,000 00
Clerk	1	1,400 00	1,400 00
Clerks	5	1,200 00	6,000 00
Do	2	1,000 00	2,000 00
Inspectors	15	1,000 00	15,000 00
Weigher and gauger	1	1,600 00	1,600 00
Assistant weigher	1	1,000 00	1,000 00
Laborers	2	720 00	1,440 00
Boatmen	2	720 00	1,440 00
Messenger	1	720 00	720 00
Inspectors (for six months)	11	1,095 00	6,022 50
Surveyor	1	3,500 00	3,500 00
Appraiser	1	3,000 00	3,000 00
Total	49	.....	55,222 50
Port of Saco, district of Saco:			
Collector	1	500 00	500 00
Port of Waldoborough, district of Waldoborough:			
Collector	1	1,200 00	1,200 00
Deputy collectors and inspectors	2	1,000 00	2,000 00
Deputy collector and inspector	1	720 00	720 00
Do	1	600 00	600 00
Deputy collectors and inspectors	2	300 00	600 00
Total	7	.....	5,120 00
Port of Wiscasset, district of Wiscasset:			
Collector	1	1,000 00	1,000 00
Deputy collector and inspector	1	1,000 00	1,000 00
Do	1	600 00	600 00
Total	3	.....	2,600 00
Port of York, district of York:			
Collector	1	250 00	250 00
NEW HAMPSHIRE.			
Port of Portsmouth, district of Portsmouth:			
Collector	1	1,200 00	1,200 00
Deputy collectors and inspectors	2	1,000 00	2,000 00
Inspectors	2	1,000 00	2,000 00
Boatman	1	400 00	400 00
Inspector	1	1,200 00	1,200 00
Total	7	.....	6,800 00
VERMONT.			
Port of Burlington, district of Vermont:			
Collector	1	4,000 00	4,000 00
Deputy collector and inspector	1	2,200 00	2,200 00
Do	1	1,800 00	1,800 00
Deputy collectors and inspectors	4	1,600 00	6,400 00
Do	2	1,400 00	2,800 00
Do	2	1,200 00	2,400 00
Do	15	1,000 00	15,000 00
Do	4	720 00	2,880 00
Do	3	600 00	1,800 00
Inspectors	2	1,400 00	2,800 00
Do	12	1,000 00	12,000 00
Clerk	1	1,000 00	1,000 00
Do	1	800 00	800 00
Clerks, when employed	2	365 00	480 00
Messenger	1	720 00	720 00
Total	52	.....	57,080 00
MASSACHUSETTS.			
Port of Barnstable, district of Barnstable:			
Collector	1	1,400 00	1,400 00
Deputy collector and inspector	1	1,000 00	1,000 00

Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
MASSACHUSETTS—continued.			
Port of Barnstable, district of Barnstable—Continued.			
Deputy collectors	3	$800 00	$2,400 00
Do	4	450 00	1,800 00
Clerk	1	300 00	300 00
Total	10	.....	6,900 00
Port of Boston, district of Boston and Charlestown:			
Collector	1	8,000 00	8,000 00
Deputy collector	1	4,500 00	4,500 00
Deputy collectors	3	3,000 00	9,000 00
Auditor and disbursing clerk	1	3,000 00	3,000 00
Cashier	1	3,000 00	3,000 00
Assistant cashier	1	2,200 00	2,200 00
Chief clerk	1	2,500 00	2,500 00
Clerks	3	2,000 00	6,000 00
Do	9	1,800 00	16,200 00
Do	17	1,600 00	27,200 00
Do	31	1,400 00	43,400 00
Do	13	1,200 00	15,600 00
Do	21	1,000 00	21,000 00
Do	6	800 00	4,800 00
Copyist	1	720 00	720 00
Messengers	5	800 00	4,000 00
Do	15	720 00	10,800 00
Warehouse superintendent	1	2,000 00	2,000 00
Storekeeper, public stores	1	2,000 00	2,000 00
Do	1	1,600 00	1,600 00
Weigher	1	2,000 00	2,000 00
Assistant weighers	3	1,400 00	4,200 00
Do	18	1,200 00	21,600 00
Measurer of marble, when employed	1	1,300 00	350 00
Gauger	1	2,000 00	2,000 00
Assistant gaugers	2	1,400 00	2,800 00
Inspectors	79	1,400 00	110,600 00
Night inspectors	30	1,200 00	36,000 00
Inspector, when employed	1	1,095 00	201 00
Laborers	2	1,000 00	2,000 00
Do	23	720 00	16,560 00
Elevator conductors	6	1,000 00	6,000 00
Boatmen	4	800 00	3,200 00
Inspectress	1	840 00	840 00
Total	305	.....	395,871 00
Naval officer	1	3,500 00	3,500 00
Deputy naval officer	1	2,500 00	2,500 00
Clerks	2	2,000 00	4,000 00
Do	4	1,800 00	7,200 00
Do	4	1,600 00	6,400 00
Do	1	1,400 00	1,400 00
Do	4	1,200 00	4,800 00
Do	2	840 00	1,680 00
Messenger	1	840 00	840 00
Total	20	.....	32,320 00
Surveyor	1	3,500 00	3,500 00
Deputy surveyor	1	2,500 00	2,500 00
Clerk	1	1,800 00	1,800 00
Do	1	1,700 00	1,700 00
Clerks	2	1,400 00	2,800 00
Clerk	1	1,000 00	1,000 00
Messenger	1	840 00	840 00
Do	1	720 00	720 00
Total	9	.....	14,860 00
Appraiser	1	4,000 00	4,000 00
Assistant appraisers	2	3,000 00	6,000 00
Examiner of drugs	1	2,500 00	2,500 00
Examiners	3	2,000 00	6,000 00
Do	9	1,800 00	16,200 00
Do	3	1,600 00	4,800 00
Do	4	1,200 00	4,800 00
Clerk	1	1,600 00	1,600 00
Clerks	2	1,400 00	2,800 00
Clerk	1	1,200 00	1,200 00

Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
MASSACHUSETTS—Continued.			
Port of Boston, district of Boston and Charlestown—Continued.			
Samplers	9	$1,200 00	$10,800 00
Assistant sampler	1	840 00	840 00
Openers and packers	5	900 00	4,500 00
Do	13	840 00	10,920 00
Porters	4	720 00	2,880 00
Messengers	2	840 00	1,680 00
Clerk to general appraiser	1	1,400 00	1,400 00
Total	62	.....	82,920 00
Port of Edgartown, district of Edgartown:			
Collector	1	1,000 00	1,000 00
Deputy collector and inspector	1	600 00	600 00
Do	1	800 00	800 00
Inspector, when employed	1	1,095 00	600 00
Boatman	1	300 00	300 00
Total	5	.....	3,300 00
Port of Fall River, district of Fall River:			
Collector	1	1,400 00	1,400 00
Deputy collector and inspector	1	1,400 00	1,400 00
Inspector	1	1,000 00	1,000 00
Boatman	1	300 00	300 00
Total	4	.....	4,100 00
Port of Gloucester, district of Gloucester:			
Collector	1	2,000 00	2,000 00
Deputy collector and inspector	1	1,200 00	1,200 00
Clerk	1	1,200 00	1,200 00
Inspector	1	1,200 00	1,200 00
Inspectors	4	1,000 00	4,000 00
Inspector	1	300 00	300 00
Boatman	1	720 00	720 00
Total	10	.....	10,620 00
Port of Marblehead, district of Marblehead:			
Collector	1	1,000 00	1,000 00
Deputy collectors and inspectors	2	1,000 00	2,000 00
Total	3	.....	3,000 00
Port of Nantucket, district of Nantucket:			
Collector	1	300	300 00
Port of New Bedford, district of New Bedford:			
Collector	1	2,000 00	2,000 00
Deputy collector	1	1,600 00	1,600 00
Clerk	1	800 00	800 00
Inspectors	2	1,000 00	2,000 00
Total	5	.....	6,400 00
Port of Newburyport, district of Newburyport:			
Collector	1	1,000 00	1,000 00
Deputy collector and inspector	1	1,000 00	1,000 00
Do	2	600 00	1,200 00
Total	4	.....	3,200 00
Port of Plymouth, district of Plymouth:			
Collector	1	1,000 00	1,000 00
Deputy collector	1	1,000 00	1,000 00
Total	2	.....	2,000 00
Port of Salem, district of Salem and Beverly:			
Collector	1	1,400 00	1,400 00
Deputy collector	1	1,200 00	1,200 00
Inspectors	2	1,000 00	2,000 00
Do	3	900 00	2,700 00
Total	7	.....	7,300 00

Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
RHODE ISLAND.			
Port of Bristol, district of Bristol and Warren:			
Collector	1	$300 00	$300 00
Port of Newport, district of Newport:			
Collector	1	1,000 00	1,000 00
Deputy collector and inspector	1	800 00	800 00
Inspector	1	600 00	600 00
Boatman	1	400 00	400 00
Total	4	.....	2,800 00
Port of Providence, district of Providence:			
Collector	1	3,500 00	3,500 00
Deputy collector	1	2,000 00	2,000 00
Do	1	1,400 00	1,400 00
Clerk	1	1,800 00	1,800 00
Storekeeper and messenger	1	840 00	840 00
Inspectors	4	1,200 00	4,800 00
Appraiser	1	3,000 00	3,000 00
Total	10	.....	17,340 00
CONNECTICUT.			
Port of Bridgeport, district of Fairfield:			
Collector	1	1,000 00	1,000 00
Deputy collector and inspector	1	1,000 00	1,000 00
Total	2	.....	2,000 00
Port of Middletown, district of Middletown:			
Collector	1	2,500 00	2,500 00
Deputy collector and inspector	1	1,600 00	1,600 00
Do	1	1,200 00	1,200 00
Clerks	2	1,000 00	2,000 00
Laborer	1	400 00	400 00
Total	6	.....	7,700 00
Port of New Haven, district of New Haven:			
Collector	1	3,500 00	3,500 00
Deputy collector and inspector	1	1,600 00	1,600 00
Do	1	1,200 00	1,200 00
Clerk and inspector	1	1,000 00	1,000 00
Inspectors	7	1,000 00	7,000 00
Night inspector	1	900 00	900 00
Messenger	1	500 00	500 00
Boatman	1	400 00	400 00
Total	14	.....	16,100 00
Port of New London, district of New London:			
Collector	1	1,400 00	1,400 00
Deputy collector and inspector	1	1,400 00	1,400 00
Inspectors	2	1,000 00	2,000 00
Total	4	.....	4,800 00
Port of Stonington, district of Stonington:			
Collector	1	600 00	600 00
Deputy collectors and inspectors	2	300 00	600 00
Total	3	.....	1,200 00
NEW YORK.			
Port of Albany, district of New York:			
Collector	1	3,500 00	3,500 00
Deputy collector and inspector	1	1,400 00	1,400 00
Deputy collectors and inspectors	2	1,000 00	2,000 00
Inspectors	4	1,000 00	4,000 00
Total	8	.....	10,900 00
Port of Buffalo, district of Buffalo Creek:			
Collector	1	4,000 00	4,000 00
Deputy collector	1	2,500 00	2,500 00
Do	1	1,600 00	1,600 00
Do	1	1,200 00	1,200 00

Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
NEW YORK—continued.			
Port of Buffalo, district of Buffalo Creek—Continued.			
Deputy collectors and inspectors	2	1,400 00	2,800 00
Deputy collector and inspector	1	1,200 00	1,200 00
Deputy collectors and inspectors	4	1,000 00	4,000 00
Clerks	2	1,400 00	2,800 00
Do	2	1,200 00	2,400 00
Inspectors	4	1,200 00	4,800 00
Do	15	1,000 00	15,000 00
Inspector, night	1	900 00	900 00
Inspector and clerk, season of navigation	1	630 00	630 00
Messenger	1	800 00	800 00
Appraiser	1	3,000 00	3,000 00
Total	38	.....	47,630 00
Port of Cape Vincent, district of Cape Vincent:			
Collector	1	2,000 00	2,000 00
Deputy collector	1	1,400 00	1,400 00
Do	1	1,200 00	1,200 00
Deputy collectors and inspectors	2	1,000 00	2,000 00
Do	7	450 00	3,150 00
Inspectors	2	1,000 00	2,000 00
Total	14	.....	11,750 00
Port of Dunkirk, district of Dunkirk:			
Collector	1	600 00	600 00
Deputy collector and inspector	1	1,000 00	1,000 00
Total	2	.....	1,600 00
Port of New York, district of New York:			
Collector	1	12,000 00	12,000 00
Deputy collectors	10	3,000 00	30,000 00
Deputy collector, Cold Spring, L. I	1	200 00	200 00
Auditor	1	5,000 00	5,000 00
Assistant auditor	1	3,500 00	3,500 00
Cashier	1	5,000 00	5,000 00
Chief clerk	1	5,000 00	5,000 00
Clerk	1	2,700 00	2,700 00
Clerks	12	2,500 00	30,000 00
Do	18	2,200 00	39,600 00
Do	37	2,000 00	74,000 00
Do	18	1,800 00	32,400 00
Do	47	1,600 00	75,200 00
Do	69	1,400 00	96,600 00
Do	102	1,200 00	122,400 00
Do	18	1,000 00	18,000 00
Do	2	900 00	1,800 00
Messengers	55	840 00	46,200 00
Do	5	720 00	3,600 00
Do	2	1,200 00	2,400 00
Do	1	1,000 00	1,000 00
Porters	15	720 00	10,800 00
Watchmen	37	1,000 00	37,000 00
Janitor	1	900 00	900 00
Engineer	1	1,400 00	1,400 00
Engineers	2	1,200 00	2,400 00
Engineer	1	1,000 00	1,000 00
Assistant engineer	1	720 00	720 00
Firemen	4	720 00	2,880 00
Superintendent of warehouses	1	2,500 00	2,500 00
Superintendent Castle Garden Bureau	1	2,000 00	2,000 00
Storekeeper	1	1,400 00	1,400 00
Assistant storekeeper	1	1,000 00	1,000 00
Weighers	4	2,500 00	10,000 00
Assistant weighers	6	1,600 00	9,600 00
Do	84	1,200 00	100,800 00
Weighers, janitors	5	600 00	3,000 00
Gangers	3	2,000 00	6,000 00
Assistant gangers	12	1,200 00	14,400 00
Measurer of marble	1	2,000 00	2,000 00
Inspectors	150	1,600 00	240,000 00
Do	100	1,400 00	140,000 00
Do	70	1,200 00	84,000 00
Inspectresses	9	1,000 00	9,000 00
Night inspectors	121	1,000 00	121,000 00
Searchers	2	600 00	1,200 00

Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
NEW YORK—continued.			
Port of New York, district of New York—Continued.			
Foremen of laborers	7	*a*$900 00	$5,477 50
Laborers	88	*a*730 00	55,088 00
Opener and packer	1	1,000 00	1,000 00
Carpenter	1	1,200 00	1,200 00
Carpenters	3	1,000 00	3,000 00
Bookbinder	1	1,200 00	1,200 00
Assistant bookbinder	1	500 00	500 00
Elevator conductor	1	800 00	800 00
Elevator men	6	*a* 900 00	4,695 00
Floor book-keepers	6	*a* 900 00	4,695 00
Scrubbers	2	480 00	960 00
Detective	1	1,200 00	1,200 00
Total	1,154	.....	1,491,415 00
Naval officer	1	8,000 00	8,000 00
Deputy naval officer	1	3,000 00	3,000 00
Auditor	1	2,500 00	2,500 00
Clerks	4	2,500 00	10,000 00
Do	8	2,200 00	17,600 00
Do	19	2,000 00	38,000 00
Do	6	1,800 00	10,800 00
Do	18	1,600 00	28,800 00
Do	10	1,400 00	14,000 00
Do	14	1,200 00	16,800 00
Clerk and messenger	1	1,000 00	1,000 00
Messengers	8	840 00	6,720 00
Messenger	1	500 00	500 00
Total	92	.....	157,720 00
Surveyor	1	8,000 00	8,000 00
Deputy surveyor	1	3,000 00	3,000 00
Deputy surveyors	2	2,500 00	5,000 00
Clerks	2	1,800 00	3,600 00
Do	9	1,600 00	14,400 00
Do	4	1,400 00	5,600 00
Do	2	1,200 00	2,400 00
Messengers	3	840 00	2,520 00
Do	5	720 00	3,600 00
Inspectors, admeasurement of vessels	7	1,400 00	9,800 00
Laborers	5	720 00	3,600 00
Total	41	.....	61,520 00
Appraiser	1	8,000 00	8,000 00
Assistant appraisers	10	3,000 00	30,000 00
Chief clerk	1	2,500 00	2,500 00
Clerk, chief of invoice bureau	1	2,500 00	2,500 00
Examiners	21	2,500 00	52,500 00
Do	8	2,200 00	17,600 00
Do	8	2,000 00	16,000 00
Do	31	1,800 00	55,800 00
Do	5	1,600 00	8,000 00
Do	4	1,400 00	5,600 00
Do	7	1,200 00	8,400 00
Clerks	2	2,000 00	4,000 00
Do	4	1,800 00	7,200 00
Do	8	1,600 00	12,800 00
Do	12	1,400 00	16,800 00
Do	20	1,200 00	24,000 00
Do	3	900 00	2,700 00
Samplers	34	1,200 00	40,800 00
Openers and packers, foremen	6	1,200 00	7,200 00
Openers and packers	128	900 00	115,200 00
Messenger	1	1,200 00	1,200 00
Messengers	35	840 00	29,400 00
Clerk, general appraiser's office	1	2,000 00	2,000 00
Do	1	1,800 00	1,800 00
Clerks, general appraiser's office	2	1,600 00	3,200 00
Do	2	1,400 00	2,800 00
Clerk	1	1,200 00	1,200 00
Opener and packer	1	900 00	900 00
Messenger	1	840 00	840 00
Clerk, board of general appraisers	1	1,600 00	1,600 00
Total	360	.....	482,540 00

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Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
NEW YORK—Continued.			
Port of Ogdensburg, district of Oswegatchie:			
Collector	1	$3,500 00	$3,500 00
Deputy collector and inspector	1	1,600 00	1,600 00
Do	1	1,400 00	1,400 00
Deputy collectors and inspectors	2	1,200 00	2,400 00
Do	5	1,000 00	5,000 00
Do	3	800 00	2,400 00
Do	3	600 00	1,800 00
Inspector	1	1,400 00	1,400 00
Total	17	.....	19,500 00
Port of Oswego, district of Oswego:			
Collector	1	4,000 00	4,000 00
Deputy collector	1	1,600 00	1,600 00
Deputy collector and clerk	1	1,200 00	1,200 00
Deputy collectors and inspectors	2	1,000 00	2,000 00
Inspector	1	1,200 00	1,200 00
Inspectors, season of navigation	8	1,095 00	4,840 00
Inspectors, two months each	3	1,095 00	366 00
Clerks	3	1,000 00	3,000 00
Clerk	1	900 00	900 00
Total	21	.....	19,106 00
Port of Patchogue, district of New York:			
Collector	1	300 00	300 00
Port of Plattsburg, district of Champlain:			
Collector	1	3,500 00	3,500 00
Deputy collector and inspector	1	1,800 00	1,800 00
Deputy collector and clerk	1	1,400 00	1,400 00
Deputy collector and inspector	1	1,200 00	1,200 00
Deputy collector and clerk	1	900 00	900 00
Deputy collectors and inspectors	4	900 00	3,600 00
Do	6	600 00	3,600 00
Inspector	1	1,000 00	1,000 00
Inspectors	3	900 00	2,700 00
Inspector	1	800 00	800 00
Inspector, during season of navigation	1	900 00	525 00
Total	21	.....	21,025 00
Port of Port Jefferson, district of New York:			
Collector	1	300 00	300 00
Port of Rochester, district of Genesee:			
Collector	1	3,500 00	3,500 00
Deputy collector and clerk	1	1,800 00	1,800 00
Do	2	1,200 00	2,400 00
Do	1	1,000 00	1,000 00
Deputy collectors and inspectors	2	1,400 00	2,800 00
Do	3	1,000 00	3,000 00
Inspector	1	1,000 00	1,000 00
Inspectors, during season of navigation	5	900 00	2,625 00
Charwoman	1	120 00	120 00
Total	17	.....	18,245 00
Port of Sag Harbor, district of New York:			
Collector	1	400 00	400 00
Deputy collector at Greenport	1	300 00	300 00
Total	2	.....	700 00
Port of Suspension Bridge, district of Niagara:			
Collector	1	3,500 00	3,500 00
Deputy collector and clerk	1	2,000 00	2,000 00
Deputy collectors and clerks	4	1,400 00	5,600 00
Do	1	1,200 00	1,200 00
Deputy collector and inspector	1	1,400 00	1,400 00
Deputy collectors and inspectors	14	1,000 00	14,000 00
Do	3	900 00	2,700 00
Inspectors	5	1,000 00	5,000 00
Inspectors, during season navigation	4	900 00	2,100 00
Inspectress	1	700 00	700 00
Messenger	1	600 00	600 00
Total	36	.....	38,800 00

Estimate of expense of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
NEW JERSEY.			
Port of Bridgeton, district of Bridgeton:			
Collector	1	$720 00	$720 00
Port of Newark, district of Newark:			
Collector	1	1,200 00	1,200 00
Deputy collector	1	1,200 00	1,200 00
Inspector	1	1,000 00	1,000 00
Total	3	.....	3,400 00
Port of Perth Amboy, district of Perth Amboy:			
Collector	1	2,000 00	2,000 00
Deputy collector	1	1,200 00	1,200 00
Deputy collectors and inspectors	2	1,000 00	2,000 00
Deputy collector and inspector	1	720 00	720 00
Inspector and clerk	1	840 00	840 00
Boatman and janitor	1	480 00	480 00
Total	7	.....	7,240 00
Port of Somers' Point, district of Great Egg Harbor:			
Collector	1	720 00	720 00
Inspector and boatman	1	500 00	500 00
Total	2	.....	1,220 00
Port of Trenton, district of Burlington:			
Collector	1	300 00	300 00
Port of Tuckerton, district of Little Egg Harbor:			
Collector	1	720 00	720 00
Inspector and boatman	1	500 00	500 00
Total	2	.....	1,220 00
PENNSYLVANIA.			
Port of Erie, district of Erie:			
Collector	1	1,400 00	1,400 00
Deputy collector	1	1,400 00	1,400 00
Inspectors, during navigation	3	1,095 00	1,890 00
Total	5	.....	4,690 00
Port of Philadelphia, district of Philadelphia:			
Collector	1	8,000 00	8,000 00
Deputy collector	1	3,000 00	3,000 00
Assistant collector, Camden, N. J	1	1,500 00	1,500 00
Auditor	1	4,500 00	4,500 00
Assistant auditor	1	2,500 00	2,500 00
Cashier	1	2,500 00	2,500 00
Chiefs of division	4	2,000 00	8,000 00
Assistant cashier	1	2,000 00	2,000 00
Storekeeper and clerk	1	2,000 00	2,000 00
Superintendent of inspectors and gaugers	1	2,000 00	2,000 00
Clerks	4	1,800 00	7,200 00
Do	12	1,600 00	19,200 00
Do	8	1,400 00	11,200 00
Do	8	1,200 00	9,600 00
Messengers	4	720 00	2,880 00
Watchmen	4	840 00	3,360 00
Do	2	720 00	1,440 00
Laborers	7	840 00	5,880 00
Do	16	720 00	11,520 00
Carpenter	1	800 00	800 00
Marker	1	720 00	720 00
Weigher	1	2,000 00	2,000 00
Assistant weighers	15	1,200 00	18,000 00
Assistant gaugers	2	1,200 00	2,400 00
Stenciler	1	840 00	840 00
Inspectors	2	1,400 00	2,800 00
Do	65	1,200 00	78,000 00
Inspector	1	1,000 00	1,000 00
Inspectress	1	1,000 00	1,000 00
Night inspector	1	1,200 00	1,200 00
Surveyor's watchmen	32	840 00	26,880 00
Night watchman	1	840 00	840 00

Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
PENNSYLVANIA—continued.			
Port of Philadelphia, district of Philadelphia—Continued.			
Boatmen	2	$720 00	$1,440 00
Type-writer	1	720 00	720 00
Total	205	.....	246,920 00
Naval officer	1	3,500 00	3,500 00
Deputy naval officer	1	2,500 00	2,500 00
Clerk	1	2,000 00	2,000 00
Clerks	2	1,800 00	3,600 00
Clerk	1	1,400 00	1,400 00
Do	1	1,200 00	1,200 00
Messenger	1	840 00	840 00
Total	8	.....	15,040 00
Surveyor	1	3,500 00	3,500 00
Deputy surveyor	1	2,500 00	2,500 00
Clerk	1	2,000 00	2,000 00
Do	1	1,400 00	1,400 00
Messenger	1	840 00	840 00
Total	5	.....	10,240 00
Appraiser	1	4,000 00	4,000 00
Assistant appraisers	2	2,500 00	5,000 00
Examiner	1	2,000 00	2,000 00
Examiners	6	1,700 00	10,200 00
Do	2	1,200 00	2,400 00
Examiner of drugs	1	1,000 00	1,000 00
Clerk	1	1,600 00	1,600 00
Clerks	2	1,400 00	2,800 00
Clerk	1	1,200 00	1,200 00
Samplers and packers	10	800 00	8,000 00
Laborer	1	800 00	800 00
Laborers	22	700 00	15,400 00
Messenger	1	700 00	700 00
Watchman	1	700 00	700 00
Clerk to general appraiser	1	1,400 00	1,400 00
Total	53	.....	57,200 00
Port of Pittsburgh, district of Pittsburgh:			
Collector	1	3,500 00	3,500 00
Deputy collector and clerk	1	1,800 00	1,800 00
Do	1	1,200 00	1,200 00
Clerk	1	1,200 00	1,200 00
Inspector	1	1,400 00	1,400 00
Inspectors	4	1,000 00	4,000 00
Messenger	1	600 00	600 00
Total	10	.....	13,700 00
DELAWARE.			
Port of Wilmington, district of Delaware:			
Collector	1	2,000 00	2,000 00
Deputy collector, inspector, and clerk	1	1,600 00	1,600 00
Deputy collectors, inspectors, and clerks	2	1,000 00	2,000 00
Deputy collector, inspector, and clerk	1	600 00	600 00
Deputy collector	1	500 00	500 00
Boatmen	5	300 00	1,500 00
Total	11	.....	8,200 00
MARYLAND.			
Port of Annapolis, district of Annapolis:			
Collector	1	600 00	600 00
Deputy collector at Saint Mary's	1	300 00	300 00
Total	2	.....	900 00
Port of Baltimore, district of Baltimore:			
Collector	1	7,000 00	7,000 00
Deputy collector	1	3,000 00	3,000 00
Deputy collector and clerk	1	2,000 00	2,000 00
Auditor	1	2,500 00	2,500 00

Estimate of expenses for collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
MARYLAND—continued.			
Port of Baltimore, district of Baltimore—Continued.			
Cashier	1	$2,500 00	$2,500 00
Clerks	8	1,800 00	14,400 00
Do	4	1,600 00	6,400 00
Do	10	1,400 00	14,000 00
Do	8	1,200 00	9,600 00
Clerk	1	1,000 00	1,000 00
Messengers	2	840 00	1,680 00
Do	5	720 00	3,600 00
Laborers	3	840 00	2,520 00
Do	13	720 00	9,360 00
Weigher	1	2,000 00	2,000 00
Assistant weighers	10	1,200 00	12,000 00
Assistant weigher and gauger	1	1,400 00	1,400 00
Inspector	1	1,400 00	1,400 00
Inspectors	33	1,200 00	39,600 00
Do	24	1,000 00	24,000 00
Inspectress	1	600 00	600 00
Boatman, steam-launch	1	720 00	720 00
Boatmen	2	500 00	1,000 00
Fireman	1	800 00	800 00
Do	1	540 00	540 00
Engineer	1	1,000 00	1,000 00
Total	136	.....	164,620 00
Surveyor	1	3,500 00	3,500 00
Deputy surveyor	1	2,500 00	2,500 00
Clerk	1	1,800 00	1,800 00
Do	1	1,200 00	1,200 00
Messengers	4	840 00	3,360 00
Messenger	1	720 00	720 00
Total	9	.....	13,080 00
Naval officer	1	3,500 00	3,500 00
Deputy naval officer	1	2,500 00	2,500 00
Clerks	2	1,600 00	3,200 00
Do	2	1,400 00	2,800 00
Clerk	1	1,200 00	1,200 00
Do	1	1,000 00	1,000 00
Do	1	840 00	840 00
Messenger	1	720 00	720 00
Total	10	.....	15,760 00
Appraiser	1	3,500 00	3,500 00
Assistant appraiser	1	2,500 00	2,500 00
Examiners	2	1,800 00	3,600 00
Do	2	1,600 00	3,200 00
Clerk	1	1,600 00	1,600 00
Messenger	1	720 00	720 00
Laborer	1	840 00	840 00
Laborers	6	720 00	4,320 00
Clerk to general appraiser	1	1,400 00	1,400 00
Total	16	.....	21,680 00
Port of Crisfield, eastern district of Maryland:			
Collector	1	1,200 00	1,200 00
Deputy collector and inspector	1	1,000 00	1,000 00
Total	2	.....	2,200 00
DISTRICT OF COLUMBIA.			
Port of Georgetown, district of Georgetown:			
Collector	1	1,600 00	1,600 00
Deputy collector	1	1,600 00	1,600 00
Inspector	1	1,000 00	1,000 00
Messenger	1	600 00	600 00
Total	4	.....	4,800 00

Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
VIRGINIA.			
Port of Alexandria, district of Alexandria:			
Collector	1	$1,200 00	$1,200 00
Deputy collector and inspector	1	500 00	500 00
Total	2		1,700 00
Port of Cape Charles City, district of Cherrystone:			
Collector	1	900 00	900 00
Deputy collector, Onancock	1	600 00	600 00
Deputy collector, Chincoteague	1	300 00	300 00
Total	3		1,800 00
Port of Newport News, district of Yorktown:			
Collector	1	2,000 00	2,000 00
Deputy collector and inspector	1	1,400 00	1,400 00
Do	1	600 00	600 00
Inspectors	2	1,000 00	2,000 00
Boatmen	2	360 00	720 00
Total	7		6,720 00
Port of Norfolk, district of Norfolk and Portsmouth:			
Collector	1	$2,000 00	$2,000 00
Deputy collector	1	1,600 00	1,600 00
Clerk	1	1,400 00	1,400 00
Do	1	1,200 00	1,200 00
Inspector	1	1,400 00	1,400 00
Inspectors	3	1,000 00	3,000 00
Boatmen	4	420 00	1,680 00
Total	12		12,280 00
Port of Petersburg, district of Petersburg:			
Collector	1	300 00	300 00
Total	1	300 00	300 00
Port of Richmond, district of Richmond:			
Collector	1	1,200 00	1,200 00
Deputy collector and clerk	1	1,200 00	1,200 00
Deputy collector at West Point	1	600 00	600 00
Inspector	1	1,000 00	1,000 00
Boatman	1	360 00	360 00
Total	5		4,360 00
Port of Tappahannock, district of Tappahannock:			
Collector	1	600 00	600 00
WEST VIRGINIA.			
Port of Wheeling, district of New Orleans:			
Collector	1	1,400 00	1,400 00
Deputy collector and clerk	1	500 00	500 00
Total	2		1,900 00
NORTH CAROLINA.			
Port of Beaufort, district of Beaufort:			
Collector	1	600 00	600 000
Port of Edenton, district of Albemarle:			
Collector	1	600 00	600 00
Deputy collector, Elizabeth City	1	300 00	300 00
Total	2		900 00
Port of New Berne, district of Pamlico:			
Collector	1	1,200 00	1,200 00
Deputy collectors and inspectors	3	300 00	900 00
Boatmen	4	240 00	960 00
Messenger	1	240 00	240 00
Total	9		3,300 00
Port of Wilmington, district of Wilmington:			
Collector	1	2,500 00	2,500 00
Deputy collector	1	1,600 00	1,600 00
Deputy collector and inspector	1	1,400 00	1,400 00

Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
NORTH CAROLINA—continued.			
Port of Wilmington, district of Wilmington—Continued.			
Clerk	1	$800 00	$800 00
Inspectors	2	1,000 00	2,000 00
Boatmen	2	420 00	840 00
Do	2	360 00	720 00
Total	10	.....	9,860 00
SOUTH CAROLINA.			
Port of Beaufort, district of Beaufort:			
Collector	1	1,400 00	1,400 00
Deputy collectors and inspectors	2	1,000 00	2,000 00
Boatmen	4	420 00	1,680 00
Total	7	.....	5,080 00
Port of Charleston, district of Charleston:			
Collector	1	3,000 00	3,000 00
Deputy collector and inspector	1	1,800 00	1,800 00
Do	1	1,600 00	1,600 00
Do	1	1,400 00	1,400 00
Inspector	1	1,400 00	1,400 00
Inspectors	3	1,000 00	3,000 00
Messenger	1	720 00	720 00
Boatmen	2	480 00	960 00
Total	11	.....	13,880 00
Port of Georgetown, district of Georgetown:			
Collector	1	600 00	600 00
Inspector and boatman	1	300 00	300 00
Total	2	.....	900 00
GEORGIA.			
Port of Atlanta, district of New Orleans:			
Collector	1	300 00	300 00
Port of Brunswick, district of Brunswick:			
Collector	1	1,400 00	1,400 00
Deputy collectors and inspectors	3	1,000 00	3,000 00
Boatmen	5	300 00	1,500 00
Total	9	.....	5,900 00
Port of Saint Mary's, district of Saint Mary's:			
Collector	1	300 00	300 00
Port of Savannah, district of Savannah:			
Collector	1	3,000 00	3,000 00
Deputy collector	1	1,800 00	1,800 00
Deputy collector and clerk	1	1,600 00	1,600 00
Deputy collector and inspector	1	1,400 00	1,400 00
Deputy collectors and inspectors	3	1,000 00	3,000 00
Clerk	1	1,400 00	1,400 00
Night inspector	1	720 00	720 00
Messenger	1	720 00	720 00
Boatmen	3	600 00	1,800 00
Boatman	1	360 00	360 00
Total	14	.....	15,800 00
FLORIDA.			
Port of Apalachicola, district of Apalachicola:			
Collector	1	1,200 00	1,200 00
Deputy collector and inspector	1	1,000 00	1,000 00
Inspector	1	900 00	900 00
Messenger	1	180 00	180 00
Total	4	.....	3,280 00
Port of Cedar Keys, district of Saint Mark's:			
Collector	1	1,200 00	1,200 00
Deputy collector and inspector	1	1,000 00	1,000 00
Deputy collector and inspector, Saint Mark's	1	300 00	300 00
Boatman and inspector	1	600 00	600 00
Total	4	.....	3,100 00

Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
FLORIDA—continued.			
Port of Fernandina, district of Fernandina:			
Collector	1	$1,200 00	$1,200 00
Deputy collector and inspector	1	1,000 00	1,000 00
Inspector and boatman	1	600 00	600 00
Total	3	.....	2,800 00
Port of Jacksonville, district of Saint John's:			
Collector	1	1,200 00	1,200 00
Deputy collector and inspector	1	1,000 00	1,000 00
Do	1	500 00	500 00
Boatman and messenger	1	300 00	300 00
Total	4	.....	3,000 00
Port of Key West, district of Key West:			
Collector	1	3,500 00	3,500 00
Deputy collector and clerk	1	2,000 00	2,000 00
Do	1	1,600 00	1,600 00
Deputy collector and inspector	1	1,400 00	1,400 00
Do	1	1,200 00	1,200 00
Deputy collectors and inspectors	3	500 00	1,500 00
Clerks	2	1,400 00	2,800 00
Do	2	1,200 00	2,400 00
Inspector	1	1,200 00	1,200 00
Inspectors	9	1,000 00	9,000 00
Night inspectors	6	900 00	5,400 00
Messenger	1	720 00	720 00
Watchman	1	720 00	720 00
Boatmen	4	400 00	1,600 00
Do	2	300 00	600 00
Total	36	.....	35,640 00
Port of Pensacola, district of Pensacola:			
Collector	1	3,000 00	3,000 00
Deputy collector and clerk	1	1,600 00	1,600 00
Do	1	1,200 00	1,200 00
Clerk	1	1,000 00	1,000 00
Inspectors	6	1,000 00	6,000 00
Night watchmen	2	720 00	1,440 00
Messenger	1	600 00	600 00
Laborer	1	500 00	500 00
Boatmen	6	420 00	2,520 00
Total	20	.....	17,860 00
Port of Saint Augustine, district of Saint Augustine:			
Collector	1	600 00	600 00
Deputy collector and inspector	1	380 00	380 00
Boatmen	2	240 00	480 00
Total	4	.....	1,460 00
ALABAMA.			
Port of Mobile, district of Mobile:			
Collector	1	2,000 00	2,000 00
Deputy collector and clerk	1	1,600 00	1,600 00
Do	1	1,400 00	1,400 00
Clerk and inspector	1	1,200 00	1,200 00
Inspector	1	1,200 00	1,200 00
Inspectors	4	1,000 00	4,000 00
Inspector and messenger	1	720 00	720 00
Total	10	.....	12,120 00
MISSISSIPPI.			
Port of Natchez, district of Natchez:			
Collector	1	500 00	500 00
Port of Shieldsborough, district of Pearl River:			
Collector	1	1,200 00	1,200 00
Deputy collector and inspector at Pascagoula	1	1,000 00	1,000 00
Deputy collector and inspector at Biloxi and Ship Island	1	1,000 00	1,000 00
Inspectors	2	1,000 00	2,000 00
Total	5	.....	5,200 00

Estimate of expenses of collecting revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
MISSISSIPPI—continued.			
Port of Vicksburg, district of Vicksburg:			
Collector	1	$500 00	$500 00
LOUISIANA.			
Port of Brashear, district of Teche:			
Collector	1	1,000 00	1,000 00
Deputy collector and inspector at Calcasieu Pass	1	600 00	600 00
Total	2	.....	1,600 00
Port of New Orleans, district of New Orleans:			
Collector	1	7,000 00	7,000 00
Deputy collector	1	3,000 00	3,000 00
Deputy collector and clerk	1	2,000 00	2,000 00
Auditor	1	2,500 00	2,500 00
Cashier	1	2,500 00	2,500 00
Clerks	3	1,800 00	5,400 00
Do	4	1,600 00	6,400 00
Do	6	1,400 00	8,400 00
Do	6	1,200 00	7,200 00
Do	2	1,000 00	2,000 00
Do	3	800 00	2,400 00
Do	2	600 00	1,200 00
Messenger	1	720 00	720 00
Messengers	5	600 00	3,000 00
Laborer	1	800 00	800 00
Laborers	10	600 00	6,000 00
Openers and packers	2	720 00	1,440 00
Sampler	1	720 00	720 00
Boatmen	16	600 00	9,600 00
Weigher	1	1,800 00	1,800 00
Assistant weighers	6	1,200 00	7,200 00
Gauger	1	1,600 00	1,600 00
Inspectors	10	1,200 00	12,000 00
Do	10	1,000 00	10,000 00
Do	10	800 00	8,000 00
Night inspectors	20	720 00	14,400 00
Total	125	.....	127,280 00
Naval officer	1	3,500 00	3,500 00
Deputy naval officer	1	2,500 00	2,500 00
Clerk	1	1,800 00	1,800 00
Clerks	2	1,600 00	3,200 00
Clerk	1	1,400 00	1,400 00
Messenger	1	600 00	600 00
Total	7	.....	13,000 00
Surveyor	1	3,500 00	3,500 00
Deputy surveyor	1	2,500 00	2,500 00
Clerk	1	1,600 00	1,600 00
Do	1	1,400 00	1,400 00
Do	1	840 00	840 00
Messengers	2	600 00	1,200 00
Total	7	.....	11,040 00
Appraiser	1	3,500 00	3,500 00
Assistant appraiser	1	2,500 00	2,500 00
Examiners	4	1,800 00	7,200 00
Examiner	1	1,000 00	1,000 00
Clerk	1	1,600 00	1,600 00
Do	1	1,400 00	1,400 00
Openers and packers	2	720 00	1,440 00
Sampler	1	720 00	720 00
Laborers	4	600 00	2,400 00
Messenger	1	600 00	600 00
Total	17	.....	22,360 00
TEXAS.			
Port of Brownsville, district of Brazos de Santiago:			
Collector	1	2,000 00	2,000 00
Deputy collector and clerk	1	1,600 00	1,600 00
Do	1	1,200 00	1,200 00
Deputy collector and inspector	1	1,200 00	1,200 00
Inspectors	5	1,200 00	6,000 00

Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
TEXAS—continued.			
Port of Brownsville, district of Brazos de Santiago—Continued:			
Mounted inspectors, forage included	11	$1,400 00	$15,400 00
Inspectress	1	720 00	720 00
Messenger	1	720 00	720 00
Total	22	.....	28,840 00
Port of Corpus Christi, district of Corpus Christi:			
Collector	1	2,500 00	2,500 00
Deputy collector and inspector	1	1,600 00	1,600 00
Deputy collector and inspector, Laredo	1	1,600 00	1,600 00
Deputy collector and inspector, Carrizo	1	1,400 00	1,400 00
Deputy collector and clerk	1	1,200 00	1,200 00
Inspector and clerk	1	1,200 00	1,200 00
Inspectors	4	1,200 00	4,800 00
Inspectors, mounted, forage included	4	1,400 00	5,600 00
Inspectress	1	720 00	720 00
Boatman	1	600 00	600 00
Messenger	1	420 00	420 00
Total	17	.....	21,640 00
Port of Eagle Pass, district of Saluria:			
Collector	1	2,000 00	2,000 00
Deputy collector and clerk	1	1,600 00	1,600 00
Deputy collector and clerk, Eagle Pass	1	1,600 00	1,600 00
Deputy collector and mounted inspector, including forage, Del Rio	1	1,400 00	1,400 00
Mounted inspectors, including forage	4	1,400 00	5,600 00
Inspectors	2	1,200 00	2,400 00
Messenger	1	360 00	360 00
Total	11	.....	14,960 00
Port of El Paso, district of Paso del Norte:			
Collector	1	2,000 00	2,000 00
Deputy collector and clerk	1	1,600 00	1,600 00
Do	1	1,400 00	1,400 00
Deputy collectors and inspectors	5	1,200 00	6,000 00
Deputy collector and inspector	1	720 00	720 00
Clerk	1	1,200 00	1,200 00
Mounted inspectors, including forage	9	1,400 00	12,600 00
Inspector	1	1,200 00	1,200 00
Night inspectors	2	720 00	1,440 00
Total	22	.....	28,160 00
Port of Galveston, district of Galveston:			
Collector	1	3,500 00	3,500 00
Deputy collector and clerk	1	2,000 00	2,000 00
Do	1	1,800 00	1,800 00
Do	1	1,600 00	1,600 00
Deputy collector and inspector, Sabine	1	1,200 00	1,200 00
Deputy collector and inspector, quarantine	1	1,200 00	1,200 00
Clerk	1	1,400 00	1,400 00
Do	1	1,200 00	1,200 00
Storekeeper and clerk	1	1,400 00	1,400 00
Messenger	1	720 00	720 00
Inspector	1	1,400 00	1,400 00
Inspectors	4	1,200 00	4,800 00
Night inspectors	4	1,000 00	4,000 00
Mounted inspector, including forage	1	1,400 00	1,400 00
Laborers	2	600 00	1,200 00
Engineer, steam-launch	1	840 00	840 00
Fireman, steam launch	1	540 00	540 00
Deck-hands, steam launch	3	480 00	1,440 00
Total	27	.....	31,640 00
TENNESSEE.			
Port of Chattanooga, district of New Orleans:			
Collector	1	350 00	350 00
Port of Memphis, district of New Orleans:			
Collector	1	1,200 00	1,200 00
Deputy collector and clerk	1	1,000 00	1,000 00
Night watchman	1	730 00	730 00
Total	3	.....	2,930 00

Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
TENNESSEE—continued.			
Port of Nashville, district of New Orleans:			
Collector	1	$600 00	$600 00
KENTUCKY.			
Port of Louisville, district of New Orleans:			
Collector	1	3,500 00	3,500 00
Deputy collector and clerk	1	1,600 00	1,600 00
Do	1	1,400 00	1,400 00
Clerks	2	1,200 00	2,400 00
Inspector, examiner, and storekeeper	1	1,200 00	1,200 00
Inspector, weigher, and gauger	1	1,000 00	1,000 00
Opener and packer	1	750 00	750 00
Messenger	1	600 00	600 00
Laborer	1	360 00	360 00
Total	10	.....	12,810 00
Port of Paducah, district of New Orleans:			
Collector	1	1,000 00	1,000 00
OHIO.			
Port of Cleveland, district of Cuyahoga:			
Collector	1	3,000 00	3,000 00
Deputy collector and clerk	1	1,600 00	1,600 00
Do	1	1,400 00	1,400 00
Deputy collector and inspector	1	1,200 00	1,200 00
Deputy collector and night inspector	1	900 00	900 00
Deputy collectors and inspectors	3	300 00	900 00
Deputy collector and examiner	1	1,600 00	1,600 00
Inspectors	3	1,000 00	3,000 00
Clerks	2	1,200 00	2,400 00
Clerk	1	1,000 00	1,000 00
Opener and packer	1	600 00	600 00
Total	16	.....	17,600 00
Port of Cincinnati, district of New Orleans:			
Collector	1	4,000 00	4,000 00
Deputy collector and clerk	1	2,000 00	2,000 00
Do	1	1,400 00	1,400 00
Clerk	1	1,400 00	1,400 00
Clerks	4	1,200 00	4,800 00
Clerk and gauger	1	1,200 00	1,200 00
Clerk	1	1,000 00	1,000 00
Inspector	1	1,400 00	1,400 00
Inspectors	3	1,200 00	3,600 00
Inspector	1	1,000 00	1,000 00
Storekeeper	1	1,000 00	1,000 00
Appraiser	1	3,000 00	3,000 00
Examiner	1	1,800 00	1,800 00
Do	1	1,600 00	1,600 00
Opener and packer	1	900 00	900 00
Laborers	2	720 00	1,440 00
Messenger	1	480 00	480 00
Total	23	.....	32,020 00
Port of Sandusky, district of Sandusky:			
Collector	1	1,400 00	1,400 00
Deputy collector and inspector	1	1,000 00	1,000 00
Deputy collectors and inspectors	2	400 00	800 00
Do	3	200 00	600 00
Deputy collector and inspector	1	100 00	100 00
Total	8	.....	3,900 00
Port of Toledo, district of Miami:			
Collector	1	1,600 00	1,600 00
Deputy collector, inspector, and clerk	1	1,400 00	1,400 00
Deputy collector and inspector	1	1,200 00	1,200 00
Inspector, season of navigation, 210 days	1	1,095 00	630 00
Messenger	1	300 00	300 00
Total	5	.....	5,130 00
INDIANA.			
Port of Evansville, district of New Orleans:			
Collector	1	1,000 00	1,000 00

Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
INDIANA—continued.			
Port of Indianapolis:			
Collector	1	$2,000 00	$2,000 00
Deputy collector and inspector	1	1,000 00	1,000 00
Clerk	1	720 00	720 00
Opener and packer	1	600 00	600 00
Total	4	.....	4,320 00
ILLINOIS.			
Port of Chicago, district of Chicago:			
Collector	1	7,000 00	7,000 00
Deputy collector and clerk	1	3,000 00	3,000 00
Deputy collectors and clerks	2	2,500 00	5,000 00
Deputy collector and clerk	1	2,200 00	2,200 00
Do	1	1,600 00	1,600 00
Do	1	240 00	240 00
Deputy collector and clerk, Michigan City	1	350 00	350 00
Auditor and clerk	1	2,200 00	2,200 00
Cashier	1	2,200 00	2,200 00
Clerk	1	2,200 00	2,200 00
Clerks	2	1,800 00	3,600 00
Do	6	1,600 00	9,600 00
Do	6	1,400 00	8,400 00
Do	7	1,200 00	8,400 00
Do	2	1,000 00	2,000 00
Messengers	2	840 00	1,680 00
Do	2	720 00	1,440 00
Watchmen	2	900 00	1,800 00
Weighers and gaugers	5	1,400 00	7,000 00
Inspectors	2	1,400 00	2,800 00
Do	9	1,200 00	10,800 00
Do	21	1,000 00	21,000 00
Appraiser	1	3,000 00	3,000 00
Examiners	2	2,000 00	4,000 00
Examiner	1	1,800 00	1,800 00
Do	1	1,600 00	1,600 00
Do	1	1,400 00	1,400 00
Do	1	1,600 00	1,600 00
Do	1	1,400 00	1,400 00
Openers and packers	4	900 00	3,600 00
Laborers	8	720 00	5,760 00
Storekeeper	1	800 00	800 00
Total	96	.....	126,470 00
Port of Galena, district of New Orleans:			
Collector	1	300 00	300 00
MISSOURI.			
Port of Kansas City, district of New Orleans:			
Collector	1	2,000 00	2,000 00
Deputy collector and inspector	1	1,000 00	1,000 00
Do	1	900 00	900 00
Total	3	.....	3,900 00
Port of Saint Joseph, district of New Orleans:			
Collector	1	1,200 00	1,200 00
Port of Saint Louis, district of New Orleans:			
Collector	1	5,000 00	5,000 00
Deputy collector and clerk	1	2,500 00	2,500 00
Deputy collectors and clerks	2	1,800 00	3,600 00
Deputy collector and clerk	1	1,600 00	1,600 00
Deputy collector and inspector	1	1,600 00	1,600 00
Clerk	1	1,600 00	1,600 00
Clerks	2	1,400 00	2,800 00
Do	2	1,200 00	2,400 00
Messenger	1	840 00	840 00
Storekeeper	1	900 00	900 00
Inspector, weigher, and gauger	1	1,400 00	1,400 00
Inspector and weigher	1	1,200 00	1,200 00
Inspector	1	1,200 00	1,200 00
Inspectors	4	1,000 00	4,000 00
Laborers	3	480 00	1,440 00
Appraiser	1	3,000 00	3,000 00
Examiner	1	1,400 00	1,400 00

Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
MISSOURI—continued.			
Port of Saint Louis, district of New Orleans—Continued.			
Examiner of drugs	1	$500 00	$500 00
Opener and packer	1	720 00	720 00
Total	27	.....	37,700 00
MICHIGAN.			
Port of Detroit, district of Detroit:			
Collector	1	3,500 00	3,500 00
Deputy collector	1	2,000 00	2,000 00
Deputy collector and clerk	1	1,600 00	1,600 00
Deputy collectors and clerks	4	1,400 00	5,600 00
Do	2	1,200 00	2,400 00
Do	7	900 00	6,300 00
Deputy collector and inspector	1	1,400 00	1,400 00
Do	1	1,200 00	1,200 00
Deputy collectors and inspectors	5	1,000 00	5,000 00
Do	18	900 00	16,200 00
Deputy collector and inspector	1	500 00	500 00
Deputy collectors and inspectors	2	300 00	600 00
Do	2	200 00	400 00
Do	6	100 00	600 00
Cashier	1	1,800 00	1,800 00
Inspectors	4	900 00	3,600 00
Inspectresses	2	500 00	1,000 00
Messenger	1	720 00	720 00
Laborer	1	720 00	720 00
Appraiser	1	2,500 00	2,500 00
Total	62	.....	57,640 00
Port of Grand Haven, district of Michigan:			
Collector	1	1,400 00	1,400 00
Deputy collector and clerk	1	1,200 00	1,200 00
Deputy collector and inspector	1	900 00	900 00
Do	1	400 00	400 00
Do	1	300 00	300 00
Deputy collector and inspector during navigation	1	400 00	400 00
Deputy collectors and inspectors during navigation	3	200 00	600 00
Do	3	100 00	300 00
Total	12	.....	5,500 00
Port of Marquette, district of Superior:			
Collector	1	1,400 00	1,400 00
Deputy collector and inspector	1	1,200 00	1,200 00
Do	1	1,000 00	1,000 00
Deputy collectors and inspectors	4	240 00	960 00
Do	4	100 00	400 00
Inspectors	2	900 00	1,800 00
Total	13	.....	6,760 00
Port of Port Huron, district of Huron:			
Collector	1	2,500 00	2,500 00
Deputy collector and clerk	1	1,800 00	1,800 00
Deputy collectors and clerks	3	1,400 00	4,200 00
Deputy collector and clerk	1	1,200 00	1,200 00
Deputy collectors and clerks	2	1,000 00	2,000 00
Deputy collector and inspector	1	1,400 00	1,400 00
Do	1	1,200 00	1,200 00
Deputy collectors and inspectors	10	1,000 00	10,000 00
Do	11	900 00	9,900 00
Do	3	720 00	2,160 00
Do	2	600 00	1,200 00
Do	3	400 00	1,200 00
Do	4	300 00	1,200 00
Deputy collector and inspector	1	200 00	200 00
Messengers	2	720 00	1,440 00
Total	46	.....	41,600 00
WISCONSIN.			
Port of La Crosse, district of New Orleans:			
Collector	1	300 00	300 00

Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
WISCONSIN—continued.			
Port of Milwaukee, district of Milwaukee:			
Collector	1	$3,500 00	$3,500 00
Deputy collector and inspector	1	1,800 00	1,800 00
Do	1	1,400 00	1,400 00
Do	1	1,000 00	1,100 00
Deputy collectors and inspectors	2	500 00	1,000 00
Deputy collector and inspector	1	400 00	400 00
Do	1	240 00	240 00
Do	1	120 00	120 00
Deputy collector and clerk	1	1,600 00	1,600 00
Do	1	1,200 00	1,200 00
Opener and packer	1	720 00	720 00
Total	12	.....	13,080 00
IOWA.			
Port of Burlington, district of New Orleans:			
Collector	1	300 00	300 00
Port of Dubuque, district of New Orleans:			
Collector	1	300 00	300 00
NEBRASKA.			
Port of Omaha, district of New Orleans:			
Collector	1	1,200 00	1,200 00
MINNESOTA.			
Port of Duluth, district of Duluth:			
Collector	1	1,200 00	1,200 00
Duputy collector and inspector	1	1,400 00	1,400 00
Deputy collectors and inspectors during navigation	2	175 00	350 00
Deputy collector and inspector	1	600 00	600 00
Total	5	.....	3,550 00
Port of Saint Vincent, district of Minnesota:			
Collector	1	2,500 00	2,500 00
Deputy collector and inspector	1	1,800 00	1,800 00
Do	1	1,600 00	1,600 00
Deputy collectors and inspectors	4	1,400 00	5,600 00
Do	6	1,200 00	7,200 00
Do	7	1,000 00	7,000 00
Total	20	.....	25,700 00
MONTANA.			
Port of Fort Benton, district of Montana and Idaho:			
Collector	1	300 00	300 00
COLORADO.			
Port of Denver, district of Denver:			
Collector	1	2,000 00	2,000 00
Deputy collector	1	1,000 00	1,000 00
Total	2	.....	3,000 00
CALIFORNIA.			
Port of Eureka, district of Humboldt:			
Collector	1	1,200 00	1,200 00
Port of San Diego, district of San Diego:			
Collector	1	1,400 00	1,400 00
Deputy collector and inspector	1	1,200 00	1,200 00
Mounted inspector	1	1,000 00	1,000 00
Inspector	1	1,000 00	1,000 00
Total	4	.....	4,600 00
Port of San Francisco, district of San Francisco:			
Collector	1	7,000 00	7,000 00
Deputy collectors	2	3,000 00	6,000 00
Auditor	1	2,500 00	2,500 00
Cashier	1	2,500 00	2,500 00
Clerk, adjuster of duties	1	2,500 00	2,500 00

Estimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
CALIFORNIA—continued.			
Port of San Francisco, district of San Francisco—Continued.			
Clerks	2	$2,000 00	$4,000 00
Do	10	1,800 00	18,000 00
Do	10	1,600 00	16,000 00
Do	7	1,400 00	9,800 00
Do	6	1,200 00	7,200 00
Clerk and messenger	1	1,000 00	1,000 00
Do	1	900 00	900 00
Do	1	840 00	840 00
Clerks and messengers	2	720 00	1,440 00
Gauger	1	2,000 00	2,000 00
Assistant gauger	1	900 00	900 00
Weigher	1	2,000 00	2,000 00
Assistant weighers	16	1,200 00	19,200 00
Inspectors	10	1,600 00	16,000 00
Do	12	1,400 00	16,800 00
Do	20	1,200 00	24,000 00
Night inspectors	25	1,200 00	30,000 00
Inspectress	1	1,000 00	1,000 00
Laborers	25	840 00	21,000 00
Boatmen	2	840 00	1,680 00
Total	160	.....	214,260 00
Naval officer	1	3,500 00	3,500 00
Deputy naval officer	1	2,500 00	2,500 00
Clerks	2	1,800 00	3,600 00
Do	5	1,600 00	8,000 00
Do	1	1,400 00	1,400 00
Clerk	1	1,200 00	1,200 00
Do	1	1,000 00	1,000 00
Total	12	.....	21,200 00
Surveyor	1	3,500 00	3,500 00
Deputy surveyor	1	2,500 00	2,500 00
Clerk	1	1,600 00	1,600 00
Do	1	1,400 00	1,400 00
Messenger	1	720 00	720 00
Total	5	.....	9,720 00
Appraiser	1	4,000 00	4,000 00
Assistant appraisers	2	2,500 00	5,000 00
Examiner of drugs	1	2,000 00	2,000 00
Examiners	3	2,000 00	6,000 00
Examiner	1	1,600 00	1,600 00
Samplers	4	1,200 00	4,800 00
Foremen of laborers	2	1,000 00	2,000 00
Total	14	.....	25,400 00
CALIFORNIA.			
Port of Wilmington, district of Wilmington:			
Collector	1	2,500 00	2,500 00
Deputy collector and inspector	1	1,400 00	1,400 00
Do	1	1,000 00	1,000 00
Deputy collectors and inspectors	2	1,000 00	2,000 00
Total	5	.....	6,900 00
OREGON.			
Port of Astoria, district of Oregon:			
Collector	1	2,500 00	2,500 00
Deputy collector and inspector	1	1,600 00	1,600 00
Do	1	1,200 00	1,200 00
Inspectors	2	1,200 00	2,400 00
Boatmen	2	480 00	960 00
Total	7	.....	8,660 00
Port of Coos Bay, district of Southern Oregon:			
Collector	1	600 00	600 00
Deputy collectors and inspectors	2	1,000 00	2,000 00
Total	3	.....	2,600 00

Esiimate of expenses of collecting the revenue from customs, &c.—Continued.

Designation.	No.	Per annum.	Aggregate.
OREGON—continued.			
Port of Portland, district of Willamette:			
Collector	1	$3,500 00	$3,500 00
Deputy collector and clerk	1	2,000 00	2,000 00
Do	1	1,800 00	1,800 00
Do	1	1,600 00	1,600 00
Do	1	1,400 00	1,400 00
Inspectors	3	1,400 00	4,200 00
Night inspectors	2	900 00	1,800 00
Storekeeper	1	1,200 00	1,200 00
Total	11	.....	17,500 00
Port of Yaquina, district of Yaquina:			
Collector	1	1,200 00	1,200 00
WASHINGTON TERRITORY.			
Port of Port Townsend, district of Puget Sound:			
Collector	1	2,500 00	2,500 00
Deputy collector and clerk	1	2,000 00	2,000 00
Deputy collectors and inspectors	5	1,400 00	7,000 00
Do	2	1,200 00	2,400 00
Clerk	1	1,200 00	1,200 00
Inspectors	4	1,400 00	5,600 00
Do	5	1,200 00	6,000 00
Do	3	900 00	2,700 00
Night inspector and watchman	1	900 00	900 00
Boatmen	3	600 00	1,800 00
Total	26	.....	32,100 00
ALASKA.			
Port of Sitka, district of Alaska:			
Collector	1	2,500 00	2,500 00
Deputy collector and inspector at Wrangle	1	1,500 00	1,500 00
Deputy collector and inspector at Tongas	1	1,500 00	1,500 00
Deputy collector and inspector at Onnalaska	1	1,500 00	1,500 00
Deputy collector and inspector at Kodiak	1	1,500 00	1,500 00
Deputy collector and inspector at Juneau	1	1,500 00	1,500 00
Deputy collector	1	1,200 00	1,200 00
Inspector at Juneau	1	1,000 00	1,000 00
Inspector afloat	1	1,000 00	1,000 00
Messenger	1	360 00	360 00
Total	10	.....	13,560 00
GENERAL.			
General appraisers	4	4,000	16,000 00
Total	4,085	.....	5,050,873 25
Total salaries	.....	.....	5,050,873 25
MISCELLANEOUS ITEMS.			
For temporary employés, when deemed necessary by the Secretary of the Treasury, rents, labor, stationery, and supplies for custom-houses, traveling and incidental expenses, in the several collection districts	.....	.....	1,300,000 00
For salaries and traveling expenses of special agents	.....	.....	90,000 00
For prevention and detection of fraud upon the customs revenue	.....	.....	50,000 00
For additional inspectors of customs appointed by the Secretary of the Treasury	.....	.....	50,000 00
Total	.....	.....	6,540,873 25

For the compensation of storekeepers of bonded warehouses, at a rate not exceeding $1,400 each per annum, night services of inspectors and other officers, special services and expenses of customs officers, traveling expenses of examiners of machinery, and compensation of merchant appraisers, such sums as may be collected for said purposes respectively, to be paid out of any money in the Treasury not otherwise appropriated.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 94.

HARBOR AT VAN BUREN, ARK.

LETTER

FROM

THE SECRETARY OF WAR,

IN RESPONSE TO

A resolution of the House calling for information concerning the changes which have recently occurred in the harbor at Van Buren, Ark., affecting navigation and facilities for commerce.

JANUARY 21, 1887.—Referred to the Committee on Rivers and Harbors and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 19, 1887.

The Secretary of War has the honor to transmit to the House of Representatives a letter of the 18th instant from the Chief of Engineers, and the accompanying copy of a report from Capt. H. S. Taber, Corps of Engineers, which will, it is believed, furnish the information called for by House resolution of the 17th ultimo, as follows:

Resolved, That the Secretary of War be requested to furnish the House of Representatives any information showing what changes, if any, have recently occurred in the harbor at Van Buren, Ark., affecting navigation and facilities for commerce, and also plans and estimates, if any be necessary, to restore the harbor and improve navigation and commercial facilities at that point.

WM. C. ENDICOTT,
Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., January 18, 1887.

SIR: I have the honor to acknowledge the reference to this Office of the resolution of the House of Representatives dated December 17, 1886, requesting the Secretary of War "to furnish the House of Representatives any information showing what changes, if any, have recently occurred in the harbor at Van Buren, Ark., affecting navigation," &c., and, in obedience to its requirements, to submit the inclosed copy of a report thereon from Capt. H. S. Taber, Corps of Engi neers, which it is believed will furnish the desired information.

It will be observed that Captain Taber reports that in 1884 the wharf at Van Buren could be reached at any stage of the river by boats navigating the upper river, and that in 1886 the wharf could not be reached by any boat navigating the upper river at a 3-foot stage. He estimates that the difficulty could be removed for about $4,000, and recommends that this sum be appropriated therefor.

His views are concurred in.

The resolution is herewith respectfully returned.

Very respectfully, your obedient servant,

J. C. DUANE,
Brig. Gen., Chief of Engineers.

Hon. WM. C. EEDICOTT,
Secretary of War.

REPORT OF CAPTAIN H. S. TABER, CORPS OF ENGINEERS.

UNITED STATES ENGINEER OFFICE,
Little Rock, Ark., January 11, 1887.

GENERAL: In accordance with the requirements of a letter from the office of the Chief of Engineers, dated Office of Chief of Engineers, Washington, D. C., December 22, 1886, inclosing a copy of a resolution of the United States House of Representatives, as follows, viz—

Resolved, That the Secretary of War be requested to furnish the House of Representatives any information showing what changes, if any, have recently occurred in the harbor at Van Buren, Ark., affecting navigation and facilities for commerce, and also plans and estimates, if any be necessary, to restore the harbor and improve navigation and commercial facilities at that point—

I have the honor to submit the following report, viz:

In his annual report for 1884, my predecessor, Maj. M. B. Adams, of the Corps of Engineers, states, relative to an examination made at Van Buren, as follows:

> My examination at Van Buren consisted in the running of lines of soundings across the river from points at the head, middle, and foot of the wharf or landing, and a fourth line from a point on the Van Buren bank, 250 yards below the landing to the head of the visible bar, opposite that point, and some 100 yards therefrom.
>
> These soundings showed that there will be good water found at theVan Buren landing even when the water falls to low-water stage—4 feet from what it was when the examition was made.

On December 28 I arrived at Van Buren, expecting to make soundings in a similar manner. There was nothing to sound, inasmuch as all along Major Adams's line No. 4 of soundings there stood a sand-bar, effectually shutting off the entire town front from navigation at anything below a 3-foot stage of the river.

In other words, since April, 1884, where Major Adams reported good water at extreme low water, there has been a fill of at least 4 feet.

As there has been for many years a bar in midstream, impassable at a medium stage, and one which obliged boats to go round its head to approach the wharf, and the head of bar being only 100 yards from the shore, it is clear that the moment this 100 yards opening closed the town front was completely shut off.

The river was at a most favorable stage for making the examination, and, as stated, this opening was found closed entirely across, with a broad bar, whose crest was 8 inches to 12 inches above low water at its lowest points.

Comment or report upon the necessity for immediate action is unnecessary.

The conformation of river above is such that this bar will be added to rather than subtracted from. Fortunately for the people the regimen of the river at this place is such that a very small outlay will correct the difficulty, if handled at once.

I have the honor to recommend that $4,000 be appropriated to build a hurdle-dike, about 500 feet long, at a point a few hundred yards above, upon the plan and principle so successfully used in this river at Pine Bluff.

It is estimated that this dike will cost about $8 per linear foot, and should be placed on the bar immediately above, on the opposite bank, to accelerate its formation and to deflect the current to the Van Buren shore. This dike need only be from 8 to 12 feet above mean low water, and is certain to produce the desired effect.

It is not possible, without delaying this paper too long, to give an adequate idea of the urgent need of this particular reach of river and the peculiar conditions by which so slight an outlay will produce so great results.

With a view to convey a better idea, though by no means a complete one, a tracing is sent with this of a rough sketch made on the ground. It will be understood that this is not drawn to a scale, but gives the relative position of the various principal points in question.

Major Adams's examination was made at 4 feet; mine at zero on the gauge. He states that his soundings would show good water after being reduced to the zero of the gauge along No. 4. This means for this locality 3 feet of water. I found a foot of dry land along the same line, showing a fill of 4 feet.

There can be no question as to this interpretation of good water, as I have in this office the steamboat captain who commanded the boat that took Major Adams over the river, and who told him what would be good water.

RECAPITULATION.

In 1884 Van Buren Wharf could be reached at any stage of the river by boats navigating the upper river.

In 1886 the wharf cannot be reached by any boat navigating the upper river after the river falls to about a 3-foot stage. A dike located on the bar above, costing about $4,000, will restore the harbor and all facilities of navigation and commerce.

It is recommended that provision be made for its immediate erection, as any delay will rapidly increase the cost.

I am, general, very respectfully your obedient servant,

H. S. TABER,
Captain of Engineers.

Brig. Gen. JAS. C. DUANE,
Chief of Engineers, U. S. A.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. DOC. No. 95.

BOUNDARY LINE BETWEEN THE UNITED STATES AND MEXICO.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

A copy of a communication from the Secretary of State in regard to the destruction of the monument marking the western initial point in the boundary between the United States and Mexico.

JANUARY 21, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 20, 1887.

SIR: I have the honor to transmit herewith, for the consideration of Congress, copy of a communication from the Secretary of State of the 12th instant, in regard to the destruction of the monument marking the western initial point in the boundary between the United States and Mexico.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

DEPARTMENT OF STATE,
Washington, January 12, 1887.

SIR: I have the honor to apprise you of the receipt of a letter from the superintendent of the United States Coast and Geodetic Survey office, dated the 4th instant, inclosing one from Prof. George Davidson, dated San Francisco, the 24th ultimo, reporting the destruction of the monument marking the western initial point in the boundary between the United States and Mexico.

There is a proposition now pending in Congress for an appropriation, pursuant to the treaty of July 29, 1882, between the two countries, to repair and re-mark the international boundary line. Until an appropri-

ation shall have been made to carry out the provisions of the existing treaty (two copies of which I inclose for your information), this Department is unable to take any action in the premises.

I have the honor to be, sir, your obedient servant,

T. F. BAYARD.

Hon. DANIEL MANNING,
Secretary of the Treasury.

[Mexico—Resurvey of boundary line.]

CONVENTION BETWEEN THE UNITED STATES OF AMERICA AND THE UNITED STATES OF MEXICO.

PROVIDING FOR AN INTERNATIONAL BOUNDARY SURVEY TO RELOCATE THE EXISTING FRONTIER LINE BETWEEN THE TWO COUNTRIES WEST OF THE RIO GRANDE.

Concluded, July 29, 1882.
Ratification advised by the Senate, August 8, 1882.
Ratified by the President of the United States of Mexico, November 7, 1882.
Ratified by the President of the United States of America, January 29, 1883.
Ratifications exchanged, March 3, 1883.
Proclaimed, March 5, 1883.

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA.

A PROCLAMATION.

Whereas a convention was concluded between the United States of America and the United States of Mexico for the purpose of defining the manner in which the monuments heretofore erected for the purpose of marking the boundary between the two countries, but which have been destroyed or displaced are to be restored to their proper places and new ones erected, if necessary; and whereas said convention was signed by the respective plenipotentiaries of the two countries at Washington on the twenty-ninth day of July, one thousand eight hundred and eighty-two, the original of which convention being in the English and Spanish languages, is, word for word, as follows:

The President of the United States of America on the one hand and the President of the United States of Mexico on the other, being desirous of putting an end to whatever difficulties arise from the destruction or displacement of some of the monuments erected for the purpose of marking the boundary between the two countries, have thought proper to conclude a convention with the object of defining the manner in which the said monuments are to be restored to their proper places and new ones erected, if necessary; to which end they have appointed as their Plenipotentiaries, to wit:

The President of the United States of America, Frederick T. Frelinghuysen, Esquire, Secretary of State of the United States of America; and the President of the United States of Mexico, Señor Don Matias Romero, Envoy Extraordinary and Minister Plenipotentiary of the United States of Mexico, in Washington;

Who, after reciprocal exhibition of their full powers, found in good and due form, have agreed upon the following articles:

El Presidente de los Estados Unidos de América, por una parte, y el Presidente de los Estados Unidos Mexicanos, por la otra, deseando poner término á las dificultades á que da lugar la destruccion ó dislocacion de algunos de los monumentos que se construyeron para marcar la línea divisoria entre ambos países, han creido oportuno celebrar una convencion con el objeto de fijar la manera con que han de ser repuestos en sus lugares respectivos dichos monumentos y erijidos otros nuevos, si fuere necesario; y al efecto han nombrado sus Plenipotenciarios; á saber:

El Presidente de los Estados Unidos de América, al Sr. Frederick T. Frelinghuysen, Secretario de Estado de los Estados Unidos de América; y el Presidente de los Estados Unidos Mexicanos, al Señor Don Matias Romero, Enviado Extraordinario y Ministro Plenipotenciario de los Estados Unidos Mexicanos en Washington;

Quienes, despues de haberse cangeado sus respectivos plenos poderes y de encontrarlos en buena y debida forma, han convenido en los artículos siguientes:

ARTICLE I.

With the object of ascertaining the present condition of the monuments marking the boundary line between the United States of America and the United States of Mexico, established by the treaties of February 2nd, 1848, and December 3rd, 1853, and for determining generally what monuments, if any, have been destroyed or removed and may require to be rebuilt or replaced, a preliminary reconnaissance of the frontier line shall be made by each government, within six months from the exchange of ratifications of this convention. These reconnaissances shall be made by parties under the control of officers of the regular army of the respective countries, and shall be effected in concert, in such manner as shall be agreed upon by the commanders of the respective parties. The expense of each reconnoitering party shall be borne by the government in whose behalf it operates.

These reconnaissance parties shall report to their respective governments, within eight months from the exchange of the ratifications of this convention:

(*a*) the condition of the present boundary monuments;

(*b*) the number of destroyed or displaced monuments;

(*c*) the places, settled or capable of eventual settlement, where it may be advisable to set the monuments closer together along the line than at present;

(*d*) the character of the new monuments required, whether of stone or iron; and their number, approximately, in each case.

ARTÍCULO I.

Con el objeto de conocer la actual condicion de los monumentos que marcan la línea divisoria entre los Estados Unidos de América y los Estados Unidos Mexicanos, establecida conforme á los tratados de 2 de Febrero de 1848 y de 3 de Diciembre de 1853, y determinar en general, qué monumentos hayan sido destruidos ó removidos de su lugar, en caso de que esto se haya verificado, y se necesite reconstruirlos ó volverlos à colocar, se hará un reconocimiento preliminar de la línea fronteriza por cada Gobierno, dentro de los seis meses siguientes al canje de ratificaciones de la presente convencion. Estos reconocimientos se harán por secciones que funcionarán bajo la direccion de oficiales del ejército regular de los respectivos países, y se verificarán obrando dichas secciones de concierto y de la manera en que lo convinieren los jefes de ambas. Los gastos de cada seccion de reconocimiento serán pagados per el gobierno en cuyo nombre funcionen.

Estas secciones de reconocimiento presentarán á sus respectivos gobiernos dentro de ocho meses contados desde el canje de ratificaciones del presente tratado, un informe:

(*a*) del estado en que se hallan actualmente los monumentos que marcan los límites;

(*b*) del número de los monumentos destruidos ó dislocados;

(*c*) de los lugares habitados ó habitables en donde fuere conveniente colocar los monumentos mas cerca entre sí en la línea divisoria, de como lo están ahora;

(*d*) de la clase de los nuevos monumentos que se requieran, ya sean de piedra ó de hierro, y de su número aproximado en cada caso.

ARTICLE II.

Pending the conclusion of the preliminary reconnaissances provided in Article I, each government shall appoint a surveying party, consisting of an Engineer-in-chief, two Associates, one of whom shall be a practical astronomer, and such number of assistant engineers and associates as it may deem proper. The two parties so appointed shall meet at El Paso del Norte, or at any other convenient place to be ageed upon, within six months from the exchange of the ratifications hereof, and shall form, when combined, an "International Boundary Commission."

ARTÍCULO II.

Antes de concluirse los reconocimientos preliminares estipulados en el Artículo I, cada gobierno nombrará una seccion de reconocimiento compuesta de un Ingeniero en Jefe y dos asociados, uno de los cuales será astrónomo práctico, y del número de ingenieros auxiliares y adjuntos que cada uno considere suficiente. Las dos secciones así organizadas se reunirán en Paso del Norte ó en algun otro lugar conveniente que se acuerde, dentro de seis meses contados desde el canje de las ratificaciones de esta convencion; y formarán, cuando estén reunidas, la "Comision Internacional de Límites."

ARTICLE III.

The International Boundary Commission shall be required and have the power and authority to set in their proper places along the boundary line between the

ARTÍCULO III.

La Comision Internacional de Límites tendrá la obligacion y la facultad y autorizacion de colocar en sus respectivos lugares á lo largo de la línea divisoria entre

United States and Mexico, from the Pacific Ocean to the Rio Grande, the monuments heretofore placed there under existing treaties, whenever such monuments shall have become displaced; to erect new monuments on the site of former monuments when these shall have been destroyed; and to set new monuments at such points as may be necessary, and be chosen by joint accord between the two Commissioner Engineers-in-Chief. In rebuilding and replacing the old monuments and in providing for new ones, the respective reports of the reconnaissance parties, provided by Article I, may be consulted; provided, however, that the distance between two consecutive monuments shall never exceed eight thousand metres, and that this limit may be reduced on those parts of the line which are inabited or capable of habitation.

los Estados Unidos y México, desde el Océano Pacifico hasta el Rio Grande, los monumentos que hasta ahora habian estado situados en ella conforme á los tratados vigentes, siempre que dichos monumentos hayan sido dislocados; para erijir nuevos monumentos en el sitio de los primitivos, si estos hubieren sido destruidos; y para establecer monumentos nuevos en los puntos en que sea necesario y sean designados de comun acuerdo por los dos Comisionados Ingenieros en Jefe. Al reconstruir y reemplazar los antiguos monumentos y al proveer para el establecimiento de los nuevos, podrán consultarse los informes respectivos de las comisiones de reconocimiento estipulados en el Artículo I; con tal que la distancia entre dos monumentos contiguos nunca exceda de ocho mil metros y que éste límite pueda reducirse en aquellas partes de la línea que están habitadas ó sean habitables.

Article IV.

Where stone shall be found in sufficient abundance the monuments may be of stone; and in other localities shall be of iron, in the form of a simple tapering four-sided shaft with pediment, rising above the ground to a height of six feet, and bearing suitable inscriptions on its sides. These monuments shall be at least two centimeters in thickness, and weigh not less than five hundred pounds each.

The approximate number thereof to be required may be determined from the reports of the preliminary reconnaissance parties, and the monuments, properly cast and finished, may be sent forward from time to time to such spots as the commission may select, to be set in place at the sites determined upon as the work progresses.

Artículo IV.

Cuando haya piedra en suficiente abundancia, podrán ser construidos los monumentos con piedra, y en las otras localidades con hierro, de la figura de una columna sencilla en forma de pirámide cuadrangular, con base que tenga seis piés de altura sobre el suelo, y con inscripciones adecuadas en sus lados. Estos monumentos tendrán cuando menos dos centímetros de espesor y un peso que no baje de quinientas libras cada uno.

El número aproximado de los que sean necesarios podrá determinarse en vista de los informes de las comisiones de reconocimiento preliminar, y los monumentos, debidamente fundidos y acabados, podrán ser enviados con anticipacion, de tiempo en tiempo, á los lugares designados por la Comision, para ser colocados en los lugares convenidos á medida que progresen los trabajos.

Article V.

The Engineers-in-Chief of both sections shall determine, by common consent, what scientific processes are to be adopted for the resetting of the old monuments and the erection of the new ones; and they shall be responsible for the proper performance of the work.

On commencing operations, each section shall report to its government the plan of operations upon which they shall have jointly agreed; and they shall from time to time submit reports of the progress made by them in the said operations; and finally they shall present a full report, accompanied by the necessary drawings, signed by the Engineer-in-Chief and the two Associate Engineers on each side, as the official record of the International Boundary Commission.

Artículo V.

Los Ingenieros en Jefe de ambas secciones determinarán de comun acuerdo los procedimientos científicos que deban adoptarse para la reposicion de los antiguos monumentos y la ereccion de los nuevos; y serán responsables de que la obra se haga debidamente.

Al comenzar los trabajos, cada seccion informará á su respectivo gobierno del plan de operaciones en que ambas hayan convenido; y de tiempo en tiempo les someterán informes de los progresos que dichas secciones hagan en las operaciones; y finalmente presentarán un informe completo, acompañado de los diseños necesarios, firmado por el Ingeniero en Jefe y los dos Ingenieros Adjuntos de cada seccion, que será el informe oficial de la Comision Internacional de Límites.

ARTICLE VI.

The expenses of each section shall be defrayed by the government which appointed it; but the cost of the monuments and of their transportation shall be equally shared by both governments.

ARTÍCULO VI.

Los gastos de cada seccion serán pagados por el gobierno que la haya nombrado; pero el costo de los monumentos y su transporte serán pagados por partes iguales por ambos gobiernos.

ARTICLE VII.

Whenever the number of the monuments to be set up shall be approximately known as the result of the labors of the preliminary reconnaissance-parties, the Engineers-in-Chief shall prepare an estimate of their cost, conveyance and setting up; and when such estimate shall have been approved by both governments, the mode of making the payment of he part to be paid by Mexico shall be determined by a special arrangement between the two governments.

ARTÍCULO VII.

Cuando sea conocido aproximadamente el número de los monumentos que deban ser colocados, como resultado de los trabajos de las secciones de reconocimiento preliminar, los Ingenieros en Jefe formarán un presupuesto de su costo, conduccion y colocacion; y cuando este presupuesto haya sido aprobado por ambos gobiernos, se determinará, por medio de un arreglo especial entre los dos Gobiernos, la manera con que México pague la parte que le corresponda.

ARTICLE VIII.

The work of the International Boundary Commission shall be pushed forward with all expedition; and the two governments hereby agree to regard the present convention as continuing in force until the conclusion of said work, provided that such time does not exceed four years and four months from the date of the exchange of the ratifications hereof.

ARTÍCULO VIII.

Los trabajos de la Comision Internacional de Límites se proseguirán con la mayor prontitud; y los dos Gobiernos convienen en considerar la presente convencion en todo su vigor y fuerza hasta que sean concluidas dichas obras; con tal que ese tiempo no exceda de cuatro años y cuatro meses, contados desde la fecha del canje de sus ratificaciones.

ARTICLE IX.

The destruction or displacement of any of the monuments described herein, after the line shall have been located by the International Boundary Commission as aforesaid, is hereby declared to be a misdemeanor, punishable according to the justice of the country of the offender's nationality, if he be a citizen of either the United States or Mexico; and if the offender be of other nationality, then the misdemeanor shall be punishable according to the justice of either country where he may be apprehended.

This convention shall be ratified on both sides and the ratifications exchanged at Washington as soon as possible.

In testimony whereof we have signed this convention in duplicate, in the English and Spanish languages, and affixed hereunto the seals of our arms.

Done in the City of Washington this 29th day of July, in the year of our Lord one thousand eight hundred and eighty-two.

ARTÍCULO IX.

Se declara delito la destruccion ó dislocacion de cualquiera de los monumentos mencionados en este convencion, despues de que haya sido localizada la línea divisoria por la Comision Internacional de Límites, en los términos convenidos aquí, y será castigado conforme á los leyes del país cuya nacionalidad tengan los culpables, ya sean estos ciudadanos de los Estados Unidos ó ya de México; y si el culpable tuviere otra nacionalidad, el delito se castigará conforme á las leyes de cualquiera de los dos países en que sea aprehendido.

La presente convencion será ratificada por ambas partes, y las ratificaciones canjeadas en Washington, tan pronto como fuere posible.

En testimonio de lo cual hemos firmado este tratado por duplicado en las lenguas Inglesa y Española y puesto en él el sello de nuestras armas.

Hecho en la ciudad de Washington, el dia 29 de Julio del año del Señor de mil ochocientos ochenta y dos.

FRED'K T. FRELINGHUYSEN. [SEAL.]
M. ROMERO. [SEAL.]

And whereas the said convention has been duly ratified on both parts, and the respective ratifications of the same were exchanged in the city of Washington on the third day of March in the year one thousand eight hundred and eighty-three:

Now therefore, be it known that I, CHESTER A. ARTHUR, President of the United States of America, have caused the said convention to be made public to the end that the same and every article and clause thereof may be observed and fulfilled with good faith by the United States of America and the citizens thereof.

In witness whereof, I have hereunto set my hand and caused the seal of the United States of America to be affixed.

Done at the city of Washington this fifth day of March in the year of our Lord one thousand eight hundred and eighty-three, and of the independence of the United States of America the one hundred and seventh.

[SEAL]

CHESTER A. ARTHUR.

By the President:

FRED'K T. FRELINGHUYSEN,
Secretary of State.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 96.

PARTING AND REFINING BULLION.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

Copy of a communication from the Director of the Mint, recommending certain legislation in the matter of parting and refining of bullion, &c.

JANUARY 21, 1887.—Referred to the Committee on Coinage, Weights, and Measures and ordered to be printed.

TREASURY DEPARTMENT, *January* 20, 1887.

SIR: I have the honor to transmit herewith, for the consideration of Congress, copy of letter of the Director of the Mint, of the 12th instant, and inclosure, recommending certain legislation in the matter of parting and refining bullion by which the sale of the by-products of acid refineries can be applied to the reduction of the expenses of such refineries.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

TREASURY DEPARTMENT,
BUREAU OF THE MINT,
Washington, D. C., January 12, 1887.

SIR: Paragraph 8, page 379, of the Supplement to the Revised Statutes of the United States, provides—

> And refining and parting of bullion shall be carried on at the mints of the United States and at the assay office at New York.
>
> And it shall be lawful to apply the money arising from charge collected from depositors for these operations pursuant to law so far as may be necessary to the defraying in full of the expenses thereof, including labor, materials, and wastage.
>
> But no part of the moneys otherwise appropriated for the support of the mints and the assay office at New York shall be used to defray the expenses of refining and parting bullion.

Under this provision of law, which was passed originally in the appropriation act approved August 15, 1876 (19 Stats., 156, 157), the charges for parting and refining bullion were so fixed at the several coinage mints and the assay office at New York that the receipts should equal, as nearly as possible, the expenses of the operations. The spent acid and blue vitriol resulting from the processes of refining, prior to October 24, 1885, have been credited on the bills for acid, thereby reducing the expenses of the refinery at the New York assay office some $20,000 a year. On the 24th October, 1885, the First Comptroller decided that the receipts from spent acid and blue vitriol must be considered as old material and, under section 3618, Revised Statutes, deposited in the Treasury. In the Report of this Bureau for the last fiscal year, pages 6 and 7, I have referred to the effect of this ruling in the accounts of the assay office at New York. A similar effect will be produced upon the accounts of the whole mint service, in that the expenditure will not appear to have been diminished by regular manufacturing assets.

A still more important effect of this ruling is to render the acid refineries of the mint service, under the present schedule of charges, no longer able to be self-supporting, as the law requires.

It will be necessary, therefore, either to increase the schedule of charges imposed upon depositors of bullion, or modify the law so as to explicitly provide for the application of the proceeds of the sale of the by-products of the acid refineries of the mints and assay offices of the United States to the reduction of the expenses of the operations of such acid refineries.

I have the honor to recommend the latter alternative, and beg to suggest that paragraph 8, page 379, of the Supplement to the Revised Statutes, be re-enacted in the legislative appropriation bill for the fiscal year 1888, so as to read as follows:

> And refining and parting of bullion shall be carried on at the mints of the United States and at the assay office at New York.
>
> And it shall be lawful to apply, pursuant to law, the moneys arising from charges collected from depositors and from the proceeds of the sale of by-products, resulting from the operations of the refinery, so far as may be necessary to the defraying in full of the expenses thereof, including labor, materials, and wastage.
>
> But no part of the moneys otherwise appropriated for the support of the mints and the assay office at New York shall be used to defray the expenses of refining and parting bullion.

Hoping that you will be pleased to present this matter to the consideration of Congress,

I am, very respectfully, your obedient servant,

JAMES P. KIMBALL,
Director of the Mint.

The SECRETARY OF THE TREASURY.

[Indorsement.]

TREASURY DEPARTMENT, *January* 14, 1887.

Respectfully referred to the First Comptroller for report.

HUGH S. THOMPSON,
Assistant Secretary.

TREASURY DEPARTMENT,
FIRST COMPTROLLER'S OFFICE,
Washington, D. C., January 15, 1887.

SIR: I have examined the letter of the Hon. James P. Kimball, Director of the Mint, to you, of January 12, 1887, in regard to appending a clause to the bill making appropriations for the legislative, executive, and judicial departments of the Government, for the fiscal year ending June 30, 1888, containing a provision similar to that which was in the bill for 1876, found in 19 Stat., 156–7, which letter you have referred to me for report.

In reply, I will say I see no good reason why such a clause should not be appended to the bill in question.

The letter of the Director of the Mint is herewith returned.

Very respectfully,

M. J. DURHAM,
Comptroller.

The SECRETARY OF THE TREASURY.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 97.

BOOKS AND MANUSCRIPTS FOR LIBRARY, STATE DEPARTMENT.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

A copy of a communication from the Secretary of State submitting an additional estimate of appropriation for the purchase of books and manuscripts for the library of the Department of State.

JANUARY 21, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 20, 1887.

SIR: I have the honor to transmit herewith, for the consideration of Congress, copy of a letter of the Secretary of State of the 15th instant, submitting an additional estimate of appropriation in the sum of $1,500 for the purchase of books and manuscripts for the library of the Department of State.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

DEPARTMENT OF STATE,
Washington, January 15, 1887.

SIR: I have the honor to inclose herewith an estimate of an amount required for the purchase of books and manuscripts for the library of this Department, and to request that you make application to Congress for an appropriation, to be included in the act making appropriations for the legislative, executive, and judicial expenses of the Government for the fiscal year ending June 30, 1887 [1888], in addition to the amount estimated as required for the purchase of books and maps which has been submitted by you. I would suggest that the language of the provision be according to the form inclosed.

I have the honor to be, sir, your obedient servant,

T. F. BAYARD.

Hon. D. MANNING,
Secretary of the Treasury.

To enable the Secretary of State to purchase for the library of the Department of State books and manuscripts, including a collection of books and pamphlets bearing upon the history of the war of the Revolution, formerly in the library of General Sir Henry Clinton, commander-in-chief of the British forces in America during that period, the same having been richly annotated in his hand; also, a collection of books and pamphlets, chiefly in the Dutch language, printed in Holland at the time of, and concerning, the diplomatic negotiations of John Adams with the States-General of the Netherlands, fifteen hundred dollars.

O

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. Doc. No. 98.

NATIONAL BOARD OF HEALTH.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

Copy of a communication from the secretary of the National Board of Health, and inclosing estimates of deficiencies in the appropriations for the salaries and expenses of the National Board of Health for the fiscal year ending June 30, 1887.

JANUARY 21, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 20, 1887.

SIR: I have the honor to transmit herewith, for the consideration of Congress, copy of letter of the secretary of the National Board of Health of October 8, 1886, inclosing estimates of deficiency in the appropriation for salaries and expenses of the National Board of Health for the fiscal year ending June 30, 1887, amounting to $7,500.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

NATIONAL BOARD OF HEALTH,
Washington, D. C., October 8, 1886.

SIR: In transmitting the estimates to cover deficiencies in appropriations for the fiscal year ending June 30, 1887, I am directed to invite attention to the laws prescribing the duties and defining the powers of the National Board of Health.

Under the act approved March 3, 1879, it is made the duty of the Board to collect information on all matters relating to public health, to advise the several Departments of the Government, the executives of the several States, and the Commissioners of the District of Columbia on all questions submitted by them, or whenever in the opinion of the Board such advice may tend to the improvement and preservation of the public health, and to make such rules and regulations as may be necessary to carry out the provisions of the act.

The act also prescribes the compensation which the members shall receive when engaged in the performance of their duties.

By the act approved July 1, 1879, the Board is authorized and empowered to provide suitable office-rooms in the District of Columbia, at a rental not exceeding $1,800 per annum, and, with the approval of the Secretary of the Treasury, to pay its secretary a sum not exceeding $100 per month.

By the virtue of the authority vested in the Board by these laws, the necessary rules and regulations have been made and suitable offices provided. Under these rules the secretary of the Board is on duty constantly, and is entitled to the compensation prescribed in the acts referred to.

The appropriation made at the last session of Congress provided only for a portion of the expenses necessarily incurred during the month of July, and as the appropriations were not finally acted upon until August 5, the Board had entered upon the occupancy of its offices during that month, and the lessor became entitled to another month's rent, the offices being held by the month.

Although clearly authorized by law to retain the possession of the offices heretofore occupied, still, in the absence of appropriations to meet expenses to be incurred in the execution of the laws, the executive committee at once undertook to reduce expenses to the lowest point possible consistent with the responsibilities resting upon the Board. To this end the secretary was directed to provide for the care of the public property and for the performance of such duties as are required by law pending further action by Congress. Efforts were made to obtain rooms in public buildings, but without success. The necessary room was therefore obtained from private parties at a cost of $30 per month.

The estimates herewith submitted are believed to be sufficient to cover expenses authorized by law to the end of the next session of Congress, and to enable the Board to more fully perform its duties during the remainder of the fiscal year.

The importance of these appropriations is most earnestly urged, but in case it shall be deemed undesirable to continue this work, which has for its object the preservation and improvement of the health of the people, it is recommended that the laws devolving such duties upon the Board be repealed.

Very respectfully,

W. P. DUNWOODY,
Secretary.

The SECRETARY OF THE TREASURY.

Estimates of appropriations required for the service of the fiscal year ending June 30, 1887, by the National Board of Health.

SALARIES AND EXPENSES NATIONAL BOARD OF HEALTH.

For per diem and expenses of members and pay of secretary (March 3, 1879, vol. 20, page 484, sections 1 to 4; July 1, 1879, vol. 21, page 46, sections 1 to 7; July 1, 15, 1886, vol. 24, pages 343, 345)	$6,000 00
For clerk and messenger, same acts	600 00
For rent, fuel, telegrams, and postage, same acts	900 00
Total	7,500 00
Amount appropriated for current fiscal year	424 66

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 99.

PLUM POINT AND LAKE PROVIDENCE REACHES.

LETTER

FROM

THE SECRETARY OF WAR,

TRANSMITTING

A communication from the Mississippi River Commission, together with a report and accompanying maps, showing the bank lines of the Plum Point and Lake Providence Reaches.

JANUARY 21, 1887.—Referred to the Committee on Rivers and Harbors and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 19, 1887.

The Secretary of War has the honor to transmit to the House of Representatives, for the information of the Committee on Rivers and Harbors, the inclosed communication of the 12th instant from the Mis sissippi River Commission, together with a report and accompanying maps, showing the bank lines of the Plum Point and Lake Providence Reaches.

As the maps are originals and of great value, it is respectfully requested that they be returned to the Department when no longer needed by the committee.

WM. C. ENDICOTT,
Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

THE MISSISSIPPI RIVER COMMISSION,
PRESIDENT'S OFFICE,
ARMY BUILDING, 33 WEST HOUSTON STREET,
New York, January 12, 1887.

SIR: I have the honor to transmit herewith maps of Plum Point and Lake Providence Reaches, with accompanying report prepared by the secretary of the Commission, in compliance with a resolution passed by the Commission, September 20, 1886—

That the secretary of the Commission be directed to prepare maps of the Plum Point and Lake Providence Reaches on a scale of 1:4000, showing the bank lines of the origi-

nal surveys, all bank lines subsequently run, and the present bank lines; also all dike and revetment work. To both the shore lines and lines of work dates of construction shall be attached. These maps shall be accompanied by a statement of the effect, if any, of the dike work in arresting caving.

The resolution further provided that—

The maps and accompanying statements shall form part of the next report to enable Congress to judge as to the advisability of repealing the instructions in the last river and harbor bill concerning the construction of revetment-works.

These maps could not be prepared in time to be embodied in the annual report of the Commission for 1886, but it is requested that they may be brought to the attention of Congress in connection therewith.

It is requested that these maps may be ultimately returned to the secretary of the Commission, as he has been able to retain only tracings of them.

Very respectfully, your obedient servant,

Q. A. GILLMORE,
Colonel of Engineers,
Bvt. Maj. Gen., U. S. A.,
Presd't Miss. River Com.

The SECRETARY OF WAR,
(Through the Chief of Engineers.)

[First indorsement.]

OFFICE CHIEF OF ENGINEERS,
U. S. ARMY,
January 18, 1887.

Respectfully forwarded to the Secretary of War, with recommendation that the papers and accompanying maps be transmitted to the Speaker of the House of Representatives for the information of the Committee on Rivers and Harbors.

As the maps are originals and of great value, it is further recommended that their return to the War Department be requested when the committee has done with them.

J. C. DUANE,
Brig. Gen., Chief of Engineers.

REPORT TO ACCOMPANY MAPS SHOWING BANK LINES OF THE PLUM POINT AND LAKE PROVIDENCE REACHES, DECEMBER, 1886.

LETTER.

OFFICE MISSISSIPPI RIVER COMMISSION,
Saint Louis, Mo., January 5, 1887.

GENERAL: I have the honor to transmit herewith maps of the Plum Point and Lake Providence Reaches of the Mississippi River, compiled in pursuance of a resolution of the Commission of September 20, 1886, and containing the information required by the same. The report of Mr. Ockerson, herewith, gives all information as to the data for the preparation of the maps and in detail the changes in bank lines since the survey of 1879.

The resolution of the Commission, referred to, required a statement of the effect, if any, of the dike work in arresting caving, and directed that these maps and the accompanying statements shall form part of

the next report, to enable Congress to judge of the advisability of repealing the instructions in the last river and harbor bill concerning the construction of revetment works.

In Fletcher's Bend (Plum Point Reach) the bank receded a maximum distance of 275 feet in 1879–'81, but it was almost stationary in 1881–'82. Immediately upon the construction of the Gold Dust Dikes the bank receded rapidly. Caving was accelerated, too, upon Craighead Point upon the construction of the Plum Point Dikes.

We find the same result at Mayersville Island (Lake Providence Reach) subsequent to the construction of the Cottonwood Dikes.

The recession of the bank opposite the Baleshed Dikes may undoubtedly be ascribed to them, as also the carrying away of the Elton Dikes, and the caving of the banks at Elton.

So far as the construction of dikes relate to the caving of banks, those so far built have only initiated such caving or accelerated it.

Pursuing the matter somewhat further, the caving of the bank above the Duncansby Dikes (Lake Providence Reach) seems to be a consequence of the recession of the bank near Pilcher's Landing, as the reduction of Stack Island and the caving at Ben Lomond similarly seem to proceed with the caving at Elton, and following the change at Ben Lomond we have the very rapid caving below Lake Providence.

The action at all these points—Fletcher's, Craighead, Duncansby, Mayersville Island, Elton, Ben Lomond, and the bend below Lake Providence—is indicative of a relation between it and the direction of approach of the volume of the river towards the bank.

Following the attack above them and proceeding with it, the Duncansby Dikes have been carried away, and the channel is now down through the locality where these dikes formerly were.

Very respectfully, your obedient servant,

THOMAS TURTLE,
Captain of Engineers,
Secretary Mississippi River Commission.

General Q. A. GILLMORE,
Corps of Engineers, U. S. A.,
President Mississippi River Commission.

REPORT.

SAINT LOUIS, MO., *December* 28, 1886.

SIR: I have the honor to make the following report concerning the maps which have been made in accordance with a resolution of the Mississippi River Commission, and in obedience to instructions received from you.

The resolution provided "that the Secretary be directed to prepare maps of the Plum Point and Lake Providence reaches * * showing the bank lines of the original surveys, all bank lines subsequently run, and the present bank lines. Also, all dike and revetment work. To both the shore lines and lines of works dates of construction shall be attached. These maps shall be accompanied by a statement of the effect, if any, of the dike work in arresting caving * * * *."

The data for these maps have been derived from plats and records on file in this office, in the district offices in Memphis, the engineer's offices at the works, and from special surveys and examinations which I made during the latter part of November and the first week in December, 1886.

As there were no funds available for a general survey of the reaches, this work was necessarily confined to a resurvey of the bends where the erosion has been of considerable extent since the last general survey, which was made in October, 1884. For the remaining portions of the reaches, where the changes have been slight, the bank line of 1886 has been assumed to coincide with that of the last general survey, and is so shown on the maps.

The bank lines shown refer to the river banks proper and the high water banks of islands and towheads. The present bank lines are represented by heavy black lines, and the dates of all lines are attached in their proper place.

PLUM POINT REACH.

At San Souci, Capt. Smith S. Leach placed the steamer Abbot and crew, together with the necessary instruments, at my disposal, and surveys were made of Ashport Bend, Fletcher's Bend, and the upper side of Craighead Point below Bullerton Towhead. This work was done on November 15, 16, and 17, 1886. The aggregate length of shore line resurveyed was about eleven miles. The condition of the revetment in the above-named bend was also noted. The condition of the dikes and revetment was largely derived from the notes of Assistant A. J. Nolty, who has been in local charge since the construction work was suspended in January, 1885.

Nearly all the signals pertaining to the local surveys have been destroyed by decay, and many of the more permanent stone marks of the general survey of 1879 have been covered by deposits, so that it was very difficult to find points of the older surveys with which to connect.

The general condition of all the works constructed on this reach is exhibited on the map.

With regard to the revetment it may be said that when the examination was made the river was unusually low and a good opportunity was thus afforded to inspect even some of the lower mat-work. In some places the revetment and mat had evidently slid down bodily, and the top ends were still visible, projecting a short distance above the surface of the water.

The conditions existing in the bends resurveyed differ very materially. The Ashport Bend lies *above* the contraction works, and, with the exception of a short distance at the head of the bend, is entirely unprotected. Fletcher's Bend lies immediately below the contraction works at Gold Dust, which deflect the current sharply against the bank. Craighead Point lies below the Plum Point system of dikes, and in fact below all the improvement works of this reach. The deflected current strikes the bank a short distance below Bullerton Towhead and follows it closely for some 2½ miles. It is practically unprotected, only a little revetment work having been done near the upper end. Along this bank the caving has increased very materially since the contraction works were put in above.

Fletcher's Bend has been partially revetted, and the greater portion of the bank thus protected has resisted the encroachment of the waters which have cut into the unprotected portion some 400 feet during the past two years. It will be noticed that during the three years preceding the construction of the Gold Dust Dikes the caving was about 100 feet or less per annum, as against some 600 feet per annum during the two succeeding years and prior to the revetment of the banks. The Gold Dust main dike was nearly completed in 1882.

Along the upper side of Craighead Point the caving before the dikes were put in above amounted to about 100 feet per annum, as against 350 feet or more after the works were constructed.

The shore-line of the low-water survey of 1879 is shown in this map. The chute of Island No. 30 had at that time from 7 to 20 feet of water. It is now dry at a stage several feet above low water, while the present shore-line follows close along the main dike above Elmot Bar.

The present low-water shore-line in Fletcher's Bend coincides very closely with that of 1879. The portion of Osceola Bar extending, in the low water of 1879, out beyond the works, has been mostly washed away, and in its place are smaller detached bars lying further out, while the general low-water shore-line on the right bank follows closely along the works from near Elmot Landing to the foot of Bullerton Towhead.

In 1879 the entrance to the Bullerton Chute at low water was about 7 feet deep and 1,300 wide. Lower down in the chute the depth increased to 20 feet or more. Now Bullerton Towhead connects with Osceola Bar and the chute is dry down below Bullerton Dike No. 2.

The chute along the left bank behind the bar, which lies opposite Bullerton Towhead, was, during the low water of 1879, from 6 to 15 feet deep and from 800 to 1,500 feet wide. It is now dry several feet above low water, and the present low-water shore-line extends from Hotchkiss Landing down along the ends of the dikes and continues to the foot of Yankee Bar. The portion of the old bar lying outside of the dikes has been washed away and the steamboat channel covers its former location. The water, which in 1879 was dissipated by flowing through the side chutes named, now flows at low water through the main channel.

Extensive deposits have been formed behind all of the dikes, in some cases even reaching up to the high-water mark.

LAKE PROVIDENCE REACH.

For the work required on this reach, Capt. W. T. Rossell directed that a survey party be organized by Mr. C. P. Ruple, who was formerly engaged on dike construction. This party, together with the survey steamer Meter and crew, was placed in my charge.

Resurveys were made of Louisiana Bend; the left bank above Duncansby, in the vicinity of Wilderness Landing and Mayersville Island; the right bank along the Elton Front; the left bank near Ben Lomond, and the bend below Lake Providence near Judge Wyly's; the total length of shore-line run being about 15 miles. While this was being done Mr. Ruple was engaged in examining the dikes, locating the various breaks, and noting their present condition.

The revetment shown in Louisiana Bend as being intact is such portions as are still in place. Almost the entire line of revetment, from the head to Pilcher's Landing, was in sight, although in places it was 300 feet or more from the present bank-line. Much of it has slid down bodily, and apparently stands nearly vertical with the ends of the mats projecting a little above low water.

Deep pockets have been marked out back of the line of revetment, but the general line of the bank as far down as Pilcher's Landing has been held. Below the latter point none of the work is in sight at low water, and the caving amounts to about 320 feet per year. The total caving in Louisiana Bend since 1881 amounts to about 3,000 feet at the point of greatest erosion. Below Pilcher's the bank is lined with a network of trees and snags for some distance out.

On the left bank below Lewis Landing the caving has been mostly done in the past two years, when it has amounted to over 400 feet per year. The upper Duncansby Towhead, with its revetment, and almost the entire Duncansby system, have been carried away. At the time of the survey a rise in the river set in, and the banks in this bend began to cave again quite rapidly.

The next caving bank begins about a mile above Wilderness Landing and extends down to about three-quarters of a mile above the foot of Mayersville Island. About one-half of this island has been washed away, together with some 3,000 feet of revetment and a dike closing the head of the chute. The caving is still going on at a rapid rate, and as the island is composed chiefly of sand, it will doubtless soon disappear entirely. The Cottonwoods Dikes, which lie nearly opposite the head of the island, have formed a bar, which puts far over toward the left bank, and no doubt does much towards increasing the eroding power of the current and hastening the destruction of the island.

Along the front of Elton plantation, beginning at the lower end of the Elton system of dikes, the caving since 1884 has been quite rapid for a length of about one and a half miles. At the time of the survey, December 1, 1886, it was caving rapidly, the bank being nearly vertical. The maximum caving here amounts to about 600 feet since 1884. The Elton system of dikes has practically disappeared. The Baleshead system of dikes, lying opposite, have caused heavy deposits, in some cases reaching to the top of the piling, and the low-water shore-line in some places lies far outside the line of dikes.

The left bank in the vicinity of Ben Lomond has also caved quite rapidly since 1884, the maximum amount in that time being 750 feet. Caving was going on quite rapidly at the time of the survey in consequence of a sudden rise in the river.

In Lake Providence Bend the caving since 1884 has been excessive, and from present appearances it bids fair to continue in the lower part of the bend. The caving here has amounted to some 2,000 feet in two years' time. This bend lies three and a half miles below the Stack Island Dikes.

On the map of this reach the present banks are shown by heavy black lines. The banks of other years are shown in colors with the proper dates attached. The present condition of the work, is duly shown as explained in the note.

I am indebted to Capt. Smith S. Leach, in charge of the first district, and to Capt. W. T. Rossell, in charge of the third district, for the ample facilities provided for doing the work required. My thanks are also due the assistant engineers in local charge, Mr. Arthur Hider and Mr. Aug. J. Nolty, for much information concerning the construction work, and to Mr. C. P. Ruple for assistance on the Lake Providence Reach.

Very respectfully, your obedient servant,

J. A. OCKERSON,
United States Assistant Engineer.

Capt. THOMAS TURTLE,
Secretary Mississippi River Commission.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. DOC. No. 100.

CLERICAL FORCE, INTERIOR DEPARTMENT.

LETTER

FROM

THE SECRETARY OF THE INTERIOR,

INCLOSING

An additional estimate of appropriations for clerical force in his Department.

JANUARY 22, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

DEPARTMENT OF THE INTERIOR,
Washington, January 18, 1887.

SIR: I have the honor to state that there are now detailed for duty in the office of the Secretary, from subordinate Bureaus in this Department, the following employés, namely:

Class.	Number.	Amount.
From the Pension Office.		
Clerk of class four ($1,800)	1	$32,400
Clerk of class three ($1,600)	1	
Clerks of class two ($1,400)	8	
Clerks of class one ($1,200)	8	
Clerks, at $1,000	4	
Copyists, at $900	3	
Messenger, at $840	1	
Laborer, at $660	1	
Total	27	
From the Patent Office.		
Third assistant examiner ($1,400)	1	9,180
Clerk of class two ($1,400)	1	
Clerk of class one ($1,200)	1	
Copyist, at $900	1	
Model attendant, at $800	1	
Skilled laborers, at $720	2	
Laborer, at $600	1	
Laborers, at $480	3	
Total	11	
From General Land Office.		
Clerks, at $1,000	2	3,800
Copyists, at $900	2	
Total	4	
From Bureau of Labor.		
Clerks of class four ($1,800)	1	1,800
Grand total (employés)	43	47,180

These details have become necessary because of the volume of business accumulating in the office of the Secretary, through which the business of the subordinate offices must pass.

When making up and submitting the annual estimates for this Department for the clerical force of my office, it was my first intention that the estimates should include amounts to cover the detailed force, but afterwards, with a view to making these estimates as low as possible, the items for the additional force in my office to take the place of that detailed from subordinate offices were stricken out. I am now, however, constrained by the pressure of business upon the office of the Secretary and the increased and increasing demands of the Bureaus for the force thus detailed, to ask for a more thorough and efficient clerical equipment.

I therefore beg leave respectfully to recommend and urgently to request that in the appropriation for the ensuing fiscal year items be inserted providing for the force above stated, as per estimate herewith, so that the volume of business in the General Land, Patent, Pension, and other of this Department may not be delayed by reason of the details offices referred to.

Very respectfully,

L. Q. C. LAMAR,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

Supplemental estimates of appropriations required for the service of the fiscal year ending June 30, 1888, by the office of the Secretary of the Interior:

SALARIES.

2 clerks, class 4	$3,600
1 clerk, class 3	1,600
10 clerks, class 2	1,400
9 clerks, class 1	10,800
6 clerks, $1,000	6,000
6 copyists, $900	5,400
1 messenger, $840	840
1 messenger, $800	800
2 assistant messengers, $720	1,440
1 laborer, $660	660
1 laborer, $600	600
3 laborers, $480	1,440
Total	47,180

Approved.

L. Q. C. LAMAR,
Secretary.

O

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. DOC. No. 101.

NAVY DEPARTMENT EMPLOYÉS.

LETTER

FROM

THE SECRETARY OF THE NAVY,

COMMUNICATING

A list of persons employed in the Navy Department during the calendar year 1887, *and the time each was actually employed, and the sum paid each.*

JANUARY 22, 1887.—Referred to the Committee on Expenditures in the Navy Department and ordered to be printed.

NAVY DEPARTMENT,
Washington, January 20, 1887.

SIR: In compliance with section 194 of the Revised Statutes, I have the honor to submit herewith a report showing the names of the "clerks and other persons" who were employed in the Navy Department during the calendar year 1886; also the time each was actually employed, and the sum paid to each.

These persons have been usefully employed, and, under the present organization of the Department, the number is not in excess of that required for the prompt dispatch of the public business.

All embraced in the list were provided for by appropriations made in the legislative, executive and judicial acts.

Very respectfully,

W. C. WHITNEY,
Secretary of the Navy.

Hon. JOHN G. CARLISLE,
Speaker of the House of Representatives.

List of clerks and other employés of the Navy Department during the calendar year 1886.

Name.	Position.	Time employed.	Amount.
Secretary's Office.			
John W. Hogg	Chief clerk	Whole year	$2,500 00
F. H. Stickney	Disbursing clerk	do	2,250 00
William P. Moran	Fourth-class clerk	do	1,800 00
W. S. McNairy	do	do	1,800 00
Jesse E. Dow	do	do	1,800 00
H. S. Bowen	do	do	1,800 00
M. S. Thompson	do	do	1,800 00
B. W. Hanna	do	March 1 to December 31	1,505 00
Do	Stenographer	January 1 to February 28	262 20
John D. O'Conner	do	August 1 to December 31	608 66
J. E. Potts	Third-class clerk	Whole year	1,600 00
Wythe Denby	do	do	1,600 00
R. T. Cheyney	do	do	1,600 00
R. B. Porter	Second-class clerk	do	1,400 00
C. H. Ridenour	do	do	1,400 00
M. L. Croxall	do	do	1,400 00
William L. Barrington	do	January 27 to December 31	1,298 84
Edson C. Brace	Stenographer	August 12 to December 31	540 29
John Cassin	First-class clerk	Whole year	1,200 00
W. R. Handy	do	January 1 to April 30	398 90
M. M. Heath	do	July 1 to December 31	600 00
J. H. Kirkwood	do	Whole year	1,200 00
Daniel R. Neal, jr	do	do	1,200 00
J. W. Anderson	do	do	1,200 00
James C. Dulin	do	do	1,200 00
John M. Williamson	do	August 20 to December 31	436 93
Rufus Prentice	Clerk	Whole year	1,000 00
J. C. Trudeau	do	do	1,000 00
E. S. Cassin	do	do	1,000 00
M. M. Heath*	do	January 1 to June 30	269 44
William Wirt	do	July 1 to December 31	500 00
M. Thompson	Telegraph operator	Whole year	1,000 00
P. T. McCurdy	Carpenter	August 1 to December 31	374 20
Lindsay Muse	Messenger	Whole year	840 00
William Pierce	do	do	840 00
W. R. Browne	Assistant messenger	do	720 00
John McCann	do	do	720 00
William M. Ellis	do	do	720 00
William F. Thomas	do	January 1 to January 15	30 00
Henry Wigginton	do	February 15 to December 31	630 00
Do	Laborer	January 1 to February 14	82 47
Charles Dunn	do	February 15 to December 31	577 47
William Wilkes	do	Whole year	660 00
H. L. Sprague	do	do	660 00
John M. Evans	do	do	660 00
Charles Dunn	Messenger boy	January 1 to February 14	52 44
James B. Allen	do	February 15 to December 31	363 94
Thomas S. Hauk	do	January 11 to December 22	398 10
W. C. Mason	do	December 23 to December 31	10 27
Do	Telegraph messenger boy	January 1 to December 22	234 15
Total			47,743 30
Bureau of Yards and Docks.			
A. E. Merritt	Chief clerk	Whole year	1,800 00
George Mackay	Draughtsman	do	1,800 00
S. Herriques	Fourth-class clerk	do	1,800 00
R. H. Yeatman	Third-class clerk	do	1,600 00
Charles Fair	Second-class clerk	do	1,400 00
J. R. Graham	First-class clerk	do	1,200 00
J. A. Kingsley	Clerk	do	1,000 00
Nathan Addison	Assistant messenger	do	720 00
Frederick Mason	Laborer	do	660 00
Total			11,980 00
Bureau of Equipment and Recruiting.			
A. W. Fletcher	Chief clerk	Whole year	1,800 00
W. W. S. Dyre	Fourth-class clerk	do	1,800 00
James Patterson	Third-class clerk	do	1,600 00
D. C. Morrison	Second-class clerk	do	1,400 00
R. A. Church	do	do	1,400 00
J. E. Alexander	First-class clerk	do	1,200 00
E. A. Roderick	do	do	1,200 00
F. A. Wilson	do	do	1,200 00

*Eighty-three days without pay.

List of clerks and other employés of the Navy Department, &c.—Continued.

Name.	Position.	Time employed.	Amount.
Bureau of Equipment and Recruiting—Continued.			
E. C. W. Chubb	Copyist	Whole year	$900 00
R. L. Barrington	do	January 1 to September 17	643 18
William D. Hadger	do	September 27 to December 31	234 78
William H. Asken	Assistant messenger	Whole year	720 00
Benjamin Harris	Laborer	do	660 00
Total			14,757 96
Bureau of Navigation.			
Louis Waldecker	Chief clerk	Whole year	1,800 00
D. A. Denison	Third-class clerk	do	1,600 00
Frank Hamilton	Second-class clerk	do	1,400 00
H. W. Wells	do	do	1,400 00
John H. Brooks	First-class clerk	do	1,200 00
Hattie E. Phelps	Clerk	do	1,000 00
Caroline Mytinger	Copyist	March 1 to December 31	752 50
R. W. Dutton	Assistant messenger	Whole year	720 00
John A. Smith	Laborer	do	660 00
Dorsey T. Seville	do	do	660 00
Total			11,192 50
Bureau of Ordnance.			
T. K. Sailer	Chief clerk	Whole year	1,800 00
C. K. Stellwagen	Draughtsman	do	1,800 00
J. R. Gisburne	Third-class clerk	do	1,600 00
E. S. Brandt	Second-class clerk	do	1,400 00
S. K. Behrend	Clerk	do	1,000 00
C. H. Middleton	Assistant messenger	do	720 00
George W. Simms	Laborer	do	660 00
Total			8,980 00
Bureau of Construction and Repair.			
H. A. Goldsborough	Chief clerk	Whole year	1,800 00
William T. Powell	Draughtsman	do	1,800 00
R. Knapp	Fourth-class clerk	do	1,800 00
C. L. Hughes	Third-class clerk	do	1,600 00
W. A. Dobson	Assistant draughtsman	do	1,400 00
F. E. Storm	Second-class clerk	do	1,400 00
Grace Willcox	First-class clerk	do	1,200 00
O. C. Fisher	Assistant messenger	do	720 00
Charles D. Sydnor	Laborer	do	660 00
Total			12,380 00
Bureau of Steam Engineering.			
W. H. H. Smith	Chief clerk	Whole year	1,800 00
George B Whiting	Draughtsman	do	2,250 00
A. P. M. Maschmeyer	Assistant draughtsman	do	1,400 00
George Schultz	Second-class clerk	do	1,400 00
W. G. Shock	do	do	1,400 00
J. H. Hoagland	First-class clerk	do	1,200 00
William Wirt	Clerk	January 1 to June 30	500 00
T. C. Brecht	Draughtsman	October 1 to December 31	250 00
W. B. Darrell	Assistant messenger	Whole year	720 00
Noble Snowdon	Laborer	do	660 00
Moses Lacey	do	do	660 00
Total			12,240 00
Bureau of Provisions and Clothing.			
J. F. Denson	Chief clerk	January 1 to June 10	801 10
Louis E. Beall	do	June 11 to December 31	998 90
J. de Bree Higgins	Fourth-class clerk	March 1 to December 31	1,505 00
W. H. Doe	Third-class clerk	Whole year	1,600 00
T. J. Lasier	do	do	1,600 00
J. de Bree Higgins	Second-class clerk	January 1 to February 28	229 40
W. R. Handy	do	May 1 to December 31	934 60
H. E. Quinn	do	Whole year	1,400 00
Epes Sargent	First-class clerk	do	1,200 00
Mortimer Clark	do	do	1,200 00

List of clerks and other employés of the Navy Department, &c.—Continued.

Name.	Position.	Time employed.	Amount.
Bureau of Provisions and Clothing—Continued.			
J. K. Lewis	First-class clerk	January 1 to February 12	$143 30
D. J. Evans	do	March 19 to December 31	943 30
A. B. Bromwell	do	March 1 to December 31	1,003 30
Do	Copyist	January 1 to February 28	147 50
William Lucas	do	May 4 to December 31	593 40
Do	Assistant messenger	January 1 to May 3	245 20
John A. Morgan	do	May 19 to December 31	445 00
Samuel H. West	Laborer	Whole year	660 00
Total			15,650 00
Bureau of Medicine and Surgery.			
Charles T. Earle	Chief clerk	Whole year	1,800 00
Benjamin White	Third-class clerk	do	1,600 00
W. S. Gibson	Second-class clerk	do	1,400 00
M. A. Austin	First-class clerk	do	1,200 00
Wilmer Worth	Clerk	do	1,000 00
M. B. Clark	Assistant messenger	January 1 to March 5	128 00
William W. Trail	do	March 6 to December 31	592 00
Brook Shaw	Laborer	Whole year	660 00
Raife Hunter	Janitor	do	600 00
Augustus Valentine	Laborer	do	480 00
Total			9,460 00
Office of the Judge-Advocate-General.			
W. F. Clarke	Fourth-class clerk	Whole year	1,800 00
C. L. Kelsey	Third-class clerk	do	1,600 00
Halleck Donoho	First-class clerk	do	1,200 00
B. F. Peters	do	do	1,200 00
Randolph Green	Laborer	do	660 00
Total			6,460 00
Naval Records War of the Rebellion.			
P. D. Haskell	First-class clerk	January 1 to August 17	756 53
S. W. Mechlin	Copyist	Whole year	720 00
Caroline Mytinger	do	January 1 to February 28	118 00
Frisbey G. Eiker	do	July 1 to December 31	360 00
Total			1,954 53
Hydrographic Office.			
John S. Stodder	Second-class clerk	Whole year	1,400 00
Thomas T. Thurlow	do	January 1 to May 31	584 60
A. C. Vogel	First-class clerk	Whole year	1,200 00
V. G. Smith	Copyist	do	900 00
Gustave Herrle	Draughtsman	do	1,800 00
F. D. Owen	do	January 1 to July 18	878 26
E. E. Court	do	Whole year	1,500 00
C. P. Bolles	do	do	1,500 00
Emil Mahlo	do	January 1 to October 31	1,251 40
Max Franke	do	Whole year	1,400 00
Leon Dessez	do	do	1,400 00
H. G. Brewer	do	do	1,400 00
C. F. P. Petersen	do	do	1,400 00
A. C. Roberts	do	November 1 to December 31	232 10
W. R. Hesselback	do	Whole year	1,216 60
W. M. Whiting	do	do	1,200 00
G. M. Littlehales	do	do	1,066 30
E. A. Scott	Draughtswoman	do	900 00
M. M. Smith	do	do	900 00
R. E. Gray	Draughtsman	do	433 20
J. E. Palmer	do	January 1 to March 24	230 57
C. E. Birch	Engraver	Whole year	1,800 00
J. A. Waddey	do	do	1,600 00
V. L. Ourdan	do	do	1,500 00
J. J. Hazzard	do	do	1,400 00
C. A. Kolb	do	do	1,200 00
W. P. Sefton	do	do	1,200 00
H. E. Gasch	do	March 25 to December 31	401 32
R. H. Gaskins	do	do	401 32

List of clerks and other employés in the Navy Department, &c.—Continued.

Name.	Position.	Time employed.	Amount.
Hydrographic Office—Cont'd.			
Charles La Hayne	Plate printer	Whole year	$1,560 00
Thomas Devine	do	do	1,252 00
W. F. B. Wall	do	do	1,200 00
C. A. Stephenson	do	November 1 to December 31	119 40
R. W. Johnson	do	do	119 40
W. H. Wilson	Assistant messenger	Whole year	720 00
John A. Gordan	Watchman	August 24 to December 31	254 45
C. A. Stephenson	Laborer	January 1 to October 31	550 60
R. W. Johnson	do	do	550 60
George Beanes	do	Whole year	660 00
Joseph N. Mayne	do	do	660 00
Lincoln Brown	do	do	660 00
Henry Johnson	do	do	660 00
Robert Adams	do	do	660 00
R. C. Hutchison	do	January 1 to September 23	482 45
C. B. Wise	do	Whole year	660 00
M. W. Fernandez	Office attendant	do	420 00
Total			43,484 57
Nautical Almanac Office.			
E. J. Loomis	Assistant	Whole year	1,600 00
G. W. Hill	do	do	1,600 00
J. Morrison	do	do	1,600 00
W. F. McK. Ritter	do	January 1 to May 15	523 09
C. Keith	do	May 16 to December 31	876 91
R. W. Prentiss	do	Whole year	1,400 00
S. J. Corigan	do	do	1,200 00
J. O. Wiessner	do	do	1,200 00
C. Keith	do	January 1 to May 15	448 35
H. Meier	do	May 16 to December 31	751 65
Do	do	January 1 to May 15	373 60
David Barcroft	do	June 3 to October 6	343 22
H. B. Hedrick	do	November 23 to December 31	105 94
W. Auhagen	do	Whole year	1,000 00
M. B. Chase	Copyist	do	810 00
J. E. Hart	Assistant messenger	do	720 00
G. W. Smith	Laborer	do	660 00
Total			15,212 76
Naval Observatory.			
A. N. Skinner	Assistant astronomer	Whole year	2,000 00
William C. Winlock	do	do	1,800 00
H. M. Paul	do	do	1,800 00
Thomas Harrison	Fourth class clerk	do	1,800 00
William F. Gardner	Instrument maker	do	1,500 00
Dennis Horigan	Watchman	do	720 00
Nicholas Cahill	do	do	720 00
William Henderson	do	do	720 00
James Burns	do	do	720 00
George Watt	Skilled laborer	do	1,000 00
George Anderson	do	do	720 00
James Kelley	Laborer	do	660 00
William D. Horigan	do	do	660 00
Thomas K. Simpson	do	do	660 00
Samuel W. Watson	do	do	660 00
William H. Malvin	do	do	660 00
John Lamkin	do	do	660 00
Henry Clay	do	do	660 00
Total			18,120 00

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. DOC. No. 102.

SPECTACLE REEF LIGHT-STATION, LAKE HURON.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

RECOMMENDING

An appropriation of $15,000 *to build a proper foundation for the fog-signal structures at Spectacle Reef light-station, Lake Huron.*

JANUARY 22, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 21, 1887.

SIR: I have the honor to transmit herewith a letter of the Light-House Board of the 18th instant, stating that the fog-signal structures at the Spectacle Reef light-station, Lake Huron, Michigan, were built upon cribs, which were constructed for a temporary purpose in 1870, and have become so much decayed as to necessitate another foundation.

The Board recommends, in view of the inadequacy of the current appropriation for the purpose, that Congress be asked to appropriate $15,000 for building a proper foundation for the fog-signal structures referred to above.

I have accordingly respectfully to transmit this communication, so that action may be taken by Congress in the matter if it appears wise to do so, agreeably to the desire of the Light-House Board.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

TREASURY DEPARTMENT,
OFFICE OF THE LIGHT-HOUSE BOARD,
Washington, January 18, 1887.

SIR: The Light-House Board has the honor to state that the fog-signal structures at the Spectacle Reef, Lake Huron, Michigan, light-station were built upon cribs, which were constructed for a temporary purpose in 1870, and that these cribs have become so much decayed that it is necessary to provide another foundation for these structures.

The current appropriation for fog-signals is entirely inadequate for this purpose, and recommendation is therefore respectfully made that Congress be asked to appropriate the sum of $15,000 for building a proper foundation for the fog-signal structures at Spectacle Reef, Lake Huron, Michigan, light-station, that being the estimated cost of the work.

Very respectfully,

S. C. ROWAN,
Vice-Admiral, U. S. N., Chairman.

The SECRETARY OF THE TREASURY.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. DOC No. 103.

INTERIOR DEPARTMENT EMPLOYÉS.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

Additional estimates of appropriation for the payment of detailed force employed in the office of the Secretary of the Interior.

JANUARY 24, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 22, 1887.

SIR: I have the honor to forward herewith an estimate in the sum of $47,180 by the Secretary of the Interior as the amount necessary to carry the detailed force employed in the office of the Secretary of the Interior on the rolls of that office, and thereby restore to the several Bureaus of the Department the employés so detailed.

Respectfully, yours,

D. MANNING,
Secretary.

The Hon. SPEAKER OF THE HOUSE OF REPRESENTATIVES.

DEPARTMENT OF THE INTERIOR,
Washington, January 18, 1887.

SIR: I have the honor to state that there are now detailed for duty in the office of the Secretary, from subordinate Bureaus in this Department, the following employés, namely:

Class.	Number.	Amount.
From the Pension Office.		
Clerk of class four ($1,800)	1	$32,400
Clerk of class three ($1,600)	1	
Clerks of class two ($1,400)	8	
Clerks of class one ($1,200)	8	
Clerks, at $1,000	4	
Copyists, at $900	3	
Messenger, at $840	1	
Laborer, at $660	1	
Total	27	

Class.	Number.	Amount.
From the Patent Office.		
Third assistant examiner ($1,400)	1	$9,180
Clerk of class two ($1,400)	1	
Clerk of class one ($1,200)	1	
Copyist, at $900	1	
Model attendant, at $800	1	
Skilled laborers, at $720	2	
Laborer, at $600	1	
Laborers, at $480	3	
Total	11	
From the General Land Office.		
Clerks, at $1,000	2	3,800
Copyists, at $900	2	
Total	4	
From the Bureau of Labor.		
Clerk of class four ($1,800)	1	1,800
Grand total (employés)	43	47,180

These details have become necessary because of the volume of business accumulating in the office of the Secretary, through which the business of the subordinate offices must pass.

When making up and submitting the annual estimates for this Department for the clerical force of my office, it was my first intention that the estimates should include amounts to cover the detailed force, but afterwards, with a view to making these estimates as low as possible, the items for the additional force in my office to take the place of that detailed from subordinate offices were stricken out. I am now, however, constrained by the pressure of business upon the office of the Secretary and the increased and increasing demands of the Bureaus for the force thus detailed, to ask for a more thorough and efficient clerical equipment.

I therefore beg leave respectfully to recommend and urgently to request that in the appropriation for the ensuing fiscal year items be inserted providing for the force above stated, as per estimate herewith, so that the volume of business in the General Land, Patent, Pension, and other offices of this Department may not be delayed by reason of the details referred to.

Very respectfully,

L. Q. C. LAMAR,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

Supplemental estimates of appropriations required for the service of the fiscal year ending June 30, 1888, by the office of the Secretary of the Interior.

SALARIES.

2 clerks of class 4	$3,600
1 clerk of class 3	1,600
10 clerks of class 2	14,000
9 clerks of class 1	10,800
6 clerks, at $1,000 each	6,000
6 copyists, at $900 each	5,400
1 messenger, at $840	840
1 messenger, at $800	800
2 assistant messengers, at $720 each	1,440
1 laborer, at $660	660
1 laborer, at $600	600
3 laborers, at $480 each	1,440
Total	47,180

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. Doc. No. 104.

INDEBTEDNESS OF PACIFIC RAILROADS.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

IN RESPONSE TO

A resolution of the House calling for information concerning the amount of the indebtedness of the subsidized Pacific Railroad Companies to the United States, and the effect upon said indebtedness of the passage of House bill No. 8318.

JANUARY 24, 1887.—Referred to the Committee on Pacific Railroads and ordered to be printed.

TREASURY DEPARTMENT,
January 22, 1887.

SIR: I am in receipt of House resolution of January 20, 1887, requesting that the House of Representatives be informed as soon as practicable what sums of money were owing from the bond-subsidized Pacific Railroad Companies to the United States on the 1st day of January, 1887; the sums which are due, principal and interest, under existing law severally and collectively from said companies, and what will be the result to the Treasury and the effect upon these debts if House bill No. 8318 should become a law and its provisions be complied with.

In reply thereto, I have the honor to state that the amount due from the several Pacific Railroad Companies for interest paid by the United States to January 1, 1887, on subsidy bonds issued to said companies was $70,854,325.62, of which there had been repaid by the companies at that date the sum of $21,552,144.14, leaving due on account of interest the sum of $49,302,181.48.

There will be due on the same account at maturity of the subsidy bonds September 11, 1897, the further sum of $43,406,921.88, making a total of $92,709,103.36 due and to become due on account of interest. There is also to become due on account of principal of these bonds at maturity the sum of $64,623,512, making an aggregate indebtedness due and to become due of $157,332,615.36.

In response to the inquiry, "What will be the result to the Treasury and the effect upon these debts if House bill 8318 should become a law and its provisions be complied with?" I will state that the present worth of the indebtedness of the several companies as of October 1, 1886, ascertained as prescribed in the bill, is $108,463,331.54.

The constant semi-annual payment required to cancel the present worth of the indebtedness above mentioned, principal and interest, in seventy years, computed at the rate of 3 per cent. per annum, reinvested semiannually, is $1,858,057.91.

The constant semi-annual payment arrived at by the method prescribed in the bill, to wit, $1,854,304.52, is less than the correctly computed semi-annual payment above mentioned by $3,753.39, or about one-fifth of 1 per cent., and this constant semi-annual payment is sufficient, if reinvested semi-annually, to pay at the rate of 2.992 per cent. per annum on the said present worth, and at that rate to extinguish the principal and interest of the debt in seventy years.

In view of certain provisions of the act of May 7, 1878, commonly known as the Thurman law, establishing a sinking-fund for the Union and Central Pacific Railroad Companies, it may be proper to consider whether the sinking-fund now held in trust by the United States should be treated as an off-set in determining the net indebtedness due the Government from these companies.

It should be mentioned, however, that a condition of the bill is that its provisions shall be accepted by the companies interested.

An analysis of the subject has been prepared by Mr. E. B. Elliott, Government actuary, a copy of which, with its inclosures, together with a detailed statement of the indebtedness due from each company, is herewith transmitted.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

UNITED STATES TREASURY DEPARTMENT,
Washington, D. C., January 22, 1887.

SIR: In the resolution of the House of Representatives of January 20, 1886, submitted by Hon. Mr. Outhwaite, relative to—

"The sums of money owing from the bond subsidized Pacific railroad companies to the United States," it is asked, "What will be the result to the Treasury, and the effect upon these debts if House bill No. 8318 should become a law, and its provisions be complied with?"

In response it may be stated that the total sum that would be due to the United States for principal and interest paid and to be paid at maturity on the subsidy bonds issued to the said companies, if no payments or reimbursements had been made thereon by the said companies, is $178,884,759.50, of which $64,623,512 is principal, and $114,261,247.50 is interest computed without compounding at 6 per cent. per annum.

The average date of the bonds issued is September 11, 1867, but the average date of the issue of these bonds to the several companies is later than this date by $\frac{532}{1000}$ of a year, about 6 months and $11\frac{2}{3}$ days, and the average date of their maturity is September 11, 1897.

The amount of deductions to be made from this total sum, according to the provisions of the bill (page 2, line 25, to page 3, line 36, to wit, reimbursements by transportation and cash on account of interest to October 1, 1886, $21,294,886.74; market value of bonds, belonging to the sinking fund held by the Treasury October 1, 1886, on account of the Pacific railroad companies, $7,743,817.03, of which the face value of bonds so held was $6,134,100, and the excess of market value over

face value of same October 1, 1886, was $1,609,717.03; cash uninvested belonging to the sinking fund October 1, 1886, $2,430,145.85, together with "simple interest at the rate of 3 per centum per annum" upon $10,173,962.88, the total amount thus belonging to the sinking fund, from October 1, 1886, to the average date of maturity, a period of $10\frac{17}{18}$ years, $3,340,451.15—is $34,809,300.77, leaving a remainder of $144,075,458.73 due to the United States at the maturity of the subsidy bonds.

The present worth, as of October 1, 1886, of this remainder, computed for the interval of $10\frac{17}{18}$ years, at simple discount, at the rate of 3 per cent. per annum, is $108,463,331.54.

A constant semi-annual payment of $1,858,057.91, reinvested semi-annually, will pay interest at the rate of 3 per cent. per annum on the said present worth, and extinguish the principal of the debt in seventy years.

The constant semi-annual payment arrived at according to the provisions of the bill (page 3, lines 37 to 47), is $1,854,304.52, which is less than the correctly computed semi-annual payment above mentioned by $3,753.39, or about $\frac{20}{100}$ of 1 per cent. This constant semi-annual payment of $1,854,304.52 is sufficient, if reinvested semi-annually, to pay at the rate of 2.992 per cent. per annum on the said present worth, and at that rate to extinguish the debt in seventy years.

Respectfully, yours,

E. B. ELLIOTT,
Government Actuary.

Hon. DANIEL MANNING,
Secretary of the Treasury.

Union Pacific Railway Company (including Kansas Pacific Railway Company).

The total amount that would be due the United States for principal and interest paid on the bonds issued to said companies at their maturity, if no payments or reimbursements had been made thereon by the companies, is $92,844,290.94.

The amount of all deductions to be made from this sum, according to the provisions of this bill (H. R. 8318), to wit: Reimbursements as per bond and interest account, $14,806,520.21; sinking-fund bonds at market value October 1, 1886, $6,701,812.72; cash uninvested October 1, 1886, belonging to sinking fund, $153,699.33; with interest on $6,855,512.05, the total amount thus belonging to the sinking fund, at 3 per cent. per annum, from October 1, 1886, to maturity (of which the average date is July 10, 1897), $2,216,644.27, is $23,878,076.53, leaving a remainder of $68,966,214.41 due to the United States at the maturity of the subsidy bonds.

The present value of this remainder October 1, 1886, computed for the interval of $10\frac{31}{40}$ years, at simple discount at the rate of 3 per cent. per annum, is $52,118,809.30.

A constant semi-annual payment of $892,834.15, reinvested semi-annually, will pay at the rate of 3 per cent. a year on the above-mentioned sum ($52,118,809.30), and also extinguish the principal of the debt in seventy years.

The constant semi-annual payment arrived at by the method prescribed in the bill ($890,403.09) is less than the semi-annual payment above mentioned ($892,834.15) by the semi-annual difference of $2,431.06, or about $\frac{27}{100}$ of 1 per cent.

The corresponding annual difference ($4,862.12) amounts to less than $\frac{1}{100}$ of 1 per cent. of $52,118,809.30, the present worth as above given.

The constant semi-annual payment of $890,403.09 is sufficient to pay, if reinvested semi-annually, at the rate of 2.989 per cent. per annum on the said present worth, and extinguish the debt in seventy years.

Central Pacific Railroad Company (including Western Pacific Railroad Company).

The total amount that would be due the United States for principal and interest paid on the bonds issued to said companies, at their maturity, if no payments or reimbursements had been made thereon by the companies, is $77,104,604.41.

The amount of all deductions to be made from this sum, according to the provisions of this bill (H. R. 8318), to wit: Reimbursements as per bond and interest account, $6,009,595.79; sinking fund bonds at market value October 1, 1886, $1,042,004.31; cash uninvested October 1, 1886, belonging to sinking fund, $2,276,446.52; with interest on $3,318,450.83; the total amount thus belonging to the sinking fund, at 6 per cent. per annum from October 1, 1886, to maturity (of which the average date is December 9, 1897), $1,113,893.32, is $10,441,939.94, leaving a remainder of $66,662,664.47 due to the United States at the maturity of the subsidy bonds.

The present value of this remainder, October 1, 1886, computed for the interval, $11\frac{17}{90}$ years, at simple discount at the rate of 3 per cent. per annum, is $49,909,657.43.

A constant semi-annual payment of $854,989.72, reinvested semi-annually, will pay at the rate of 3 per cent. a year on the above-mentioned sum ($49,909,657.43), and also extinguish the principal of the debt in seventy years.

The constant semi-annual payment arrived at by the method prescribed in the bill ($854,093.34) is less than the semi-annual payment above mentioned ($854,989.72) by the semi-annual difference of $896.38, or about $\frac{10}{100}$ of 1 per cent.

The corresponding annual difference ($1,792.76) amounts to less than $\frac{4}{1000}$ of 1 per cent. of $49,909,657.43, the present worth as above given.

The constant semi-annual payment of $854,093.34 is sufficient to pay, if reinvested semi-annually at the rate of 2.996 per cent. per annum on the said present worth, and extinguish the debt in seventy years.

Pacific railroad indebtedness, January 1, 1887

	Interest paid by United States.	Repaid by companies.	Balance interest due the United States.	Interest to become due.	Total interest due and to become due.	Principal to become due.
Central Pacific	$28,111,876 87	$6,051,002 69	$22,060,874 18	$17,674,577 80	$39,735,451 98	$25,885,120 00
Kansas Pacific	7,263,873 09	3,467,005 95	3,796,867 14	3,925,070 00	7,721,937 14	6,303,000 00
Union Pacific	29,860,422 57	11,614,242 04	18,246,180 53	18,255,413 28	36,501,593 81	27,236,512 00
Central Branch, Union Pacific	1,837,808 26	284,022 55	1,553,785 71	988,800 00	2,542,585 71	1,600,000 00
Western Pacific	2,022,949 74	9,367 00	2,013,582 74	1,439,520 00	3,453,102 74	1,970,560 00
Sioux City and Pacific	1,757,395 09	126,503 91	1,630,891 18	1,123,540 80	2,754,431 98	1,628,320 00
Total	70,854,325 62	21,552,144 14	49,302,181 48	43,406,921 88	92,709,103 36	64,623,512 00

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 105.

PORTAGE LAKE CANAL.

LETTER

FROM

THE ACTING SECRETARY OF WAR,

TRANSMITTING,

With map and accompanying papers, a report by a Board of Engineers upon the expediency of the acquisition by the Government of the Portage Lake and River Improvement Company Canal, and the Lake Superior Ship Canal Railway and Iron Company Canal, in the State of Michigan.

JANUARY 25, 1887.—Referred to the Committee on Rivers and Harbors and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 24, 1887.

The Acting Secretary of War has the honor to transmit to Congress, in compliance with the requirements of the river and harbor act of August 5, 1886, a letter of the 6th instant from the Chief of Engineers, and a copy of a report, with appendices and a map from a Board of Engineers, constituted in compliance with the provisions of said act "to examine in all their relations to commerce the two improved water-ways known as the Portage Lake and River Improvement Company Canal and the Lake Superior Ship Canal Railway and Iron Company Canal, being the improved harbors of refuge and the water communication across Keweenaw Point, from Keweenaw Bay to Lake Superior, by way of Portage River and Lake, in the State of Michigan, with a view to making the same a free passage-way and harbors of refuge, to consider their value and all matters connected with their usefulness to navigation, and which shall give information as to the expediency of the work and the desirability of their acquisition and improvement."

The Board recommends (1) that the offer of the companies be accepted to transfer all right and title to the canal; the works of improvement on Portage River; the harbor works upon Lake Superior and Keweenaw Bay, with all lands and franchises connected therewith, free from all incumbrances and involving no other payments for bonds or otherwise whatsoever, for the gross sum of $350,000; and (2) that the route be made a free water-way of the United States, subject to no tolls or assessments whatever.

In the opinion of the Board the price asked is reasonable, and the franchises now owned by these corporations have been legally and fairly

acquired, but bear heavily upon commerce, and the companies are willing to yield to the popular demand for a free water-way as soon as they are protected from actual loss themselves.

Attention is called to the serious obstructions to navigation now existing in Portage Lake from mining deposits, and to existence of a low railroad bridge that would become a serious impediment to navigation should the route be further enlarged.

The Board submits estimates for a navigable depth of 16 feet with a minimum width of 70 feet to be obtained by dredging wherever required throughout the entire extent of the water-way, and in addition, estimates for an increase, should the future needs of commerce demand it, of the navigable depth of 20 feet, with corresponding increase of width; also estimates of the cost required to provide for commerce as well as refuge, enlarged and safe entrances from Keweenaw Bay and from the lake.

The conclusions and recommendations of the Board are concurred in by the Chief of Engineers and by the Department.

S. V. BENÉT,
Brig. Gen., Chief of Ordnance,
and Acting Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., January 6, 1887.

SIR: I have the honor to submit herewith a copy of the report, with appendices and a map, received at this office, December 23, from the Board of Engineer Officers constituted in compliance with the following provision of the river and harbor act of August 5, 1886, viz:

> That the Secretary of War is authorized and directed to appoint a Board of three engineers from the United States Army, whose duty it shall be to examine, in all their relations to commerce, the two improved water-ways known as the Portage Lake and River Improvement Company Canal and the Lake Superior Ship-Canal Railway and Iron Company Canal, being the improved harbors of refuge and the water communication across Keweenaw Point, from Keweenaw Bay to Lake Superior, by way of Portage River and Lake, in the State of Michigan, with a view to making the same a free passage-way and harbors of refuge, to consider their value and all other matters connected with their usefulness to navigation, and which shall give information as to the expediency of the work and the desirability of their acquisition and improvement. The said Board shall report to the Secretary of War, who shall lay its report before Congress, at its next session, together with the views of himself and the Chief of Engineers of the United States Army thereon.

The Board, after careful consideration of the subject in all its bearings, and in the light of all the information it has been able to collect, recommends (1) that the offer of the companies be accepted to transfer all right and title to the canal; the works of improvement on Portage River; the harbor works upon Lake Superior and Keweenaw Bay, with all lands and franchises connected therewith, free from all incumbrances and involving no other payments for bonds or otherwise whatsoever, for the gross sum of $350,000, and (2) that the route be made a free water-way of the United States, subject to no tolls or assessments whatever.

Regarding the values of the two improvements which the companies propose to transfer to the United States for the above sum, the Board makes an exhibit of their past expenditures and receipts and concludes

that the price asked is reasonable; that the franchises now owned by these corporations have been legally and fairly acquired, but they bear heavily upon commerce, and the companies seem willing to yield to the popular demand for a free water-way so soon as they are protected against actual loss themselves; and further, that the pressure for the purchase does not originate with the owners of the property, but with the mining population and the general commerce of the lakes.

The Board calls attention to the serious artificial obstructions to navigation now existing in Portage Lake from mining deposits, and indicate certain harbor lines for approval by the Secretary of War, under section 2 of the river and harbor act of August 5, 1886, beyond which such deposits may not extend, and recommends that proper legal means be adopted for abating such infringements in the future. Attention is also called to the existence of a low railroad bridge that would become a serious impediment to navigation should the route be further enlarged.

Having caused careful examinations and surveys to be made of all parts of the route where work is likely to be required by any project for further improvement, the Board submits estimates for a navigable depth of 16 feet with a minimum width of 70 feet to be obtained by dredging wherever required throughout the entire extent of the water-way, and, in addition, estimates for an increase, should the future needs of commerce demand it, of the navigable depth to 20 feet with corresponding increase of width. Estimates are also submitted of the cost of such improvements as would be required to provide, for commerce as well as refuge, enlarged and safe entrances from Keweenaw Bay and from the lake.

Being, by the terms of the act of August 5, required to give my views with regard to the matters under consideration, it appears to be sufficient to state that the careful, thorough, and certainly disinterested treatment of the whole subject by the Board of Engineers leads me to a full concurrence in its conclusions and recommendations.

Very respectfully, your obedient servant,

J. C. DUANE,
Brig. Gen., Chief of Engineers.

Hon. WILLIAM C. ENDICOTT,
Secretary of War.

REPORT OF BOARD OF ENGINEERS RESPECTING WATER COMMUNICATION ACROSS KEWEENAW POINT, LAKE SUPERIOR, MICHIGAN.

ARMY BUILDING,
New York, December 22, 1886.

GENERAL: The Board of Engineers, constituted by Special Order 112, paragraph 3, Headquarters Corps of Engineers, Washington, D. C., August 13, 1886, to consider and report upon certain questions, under act of Congress approved August 5, 1886, in connection with the Portage Lake and River Improvement Company Canal, and the Lake Superior Ship-Canal Railway and Iron Company Canal, &c., Michigan, has the honor to submit the following report:

The southern shore of Lake Superior from Sault Ste. Marie on the east to Duluth on the west, a direct distance of about 375 miles, conforms in general to the 46° 30′ parallel of north latitude, but midway between the two cities the rocky promontory of Keweenaw Point projects northeastwardly into the lake, and compels vessels engaged in

the coasting trade to make a wide detour. The shores of this promontory are bold, with outlying reefs, dangerous to navigation, and with no good harbors to afford refuge in storms. All important copper mines of the Lake Superior region heretofore opened lie north of the 46° 30′ parallel of north latitude, near or upon this projecting point.

About 40 miles southwest from its extremity the promontory is cut nearly in a north and south direction, by the water-way which forms the subject of this report. Its total length is 24 miles. Of this distance nature has made about 16 miles navigable for all classes of vessels through Portage Lake, which occupies a narrow and deep chasm, formed by some ancient convulsion.

Heading about 2 miles from Lake Superior on the northwest side of Keweenaw Point it extends southward, receiving from the east the overflow of Torch Lake. The natural depth of both lakes is ample for all purposes of commerce, present and prospective. They drain, by Portage River into Keweenaw Bay, the great re-entrant formed by the promontory and the southern shore of Lake Superior. The original draught which could be carried through Portage River into the lake was from 3 to 5 feet. To secure this depth on many interior rivers large expenditures are annually made by the Government.

Hancock and Houghton are the chief shipping ports of the copper industry. They lie opposite each other on Portage Lake, about 10 miles from Lake Superior. When the development of the mines had reached such a point as to render the demand for increased facilities of communication imperative, the country was upon the eve of civil war. The work was inaugurated and has been completed without assistance from the General Government.

The project of cutting a ship-canal through the ridge of sand and hardpan separating the north end of Portage Lake from Lake Superior was also formed during the war, and a company was incorporated for the purpose. The present canal has resulted, after various changes in organization, which will be considered more in detail below. The General Government has aided this part of the work by appropriating 400,000 acres of public lands. No other assistance was received from the General Government or from the State of Michigan.

These two improvements, although owned by separate corporations, are now practically controlled by the same individuals.

NATIONAL IMPORTANCE OF PORTAGE LAKE ROUTE.

Before going into details respecting the history, present condition, and present value of this water-way, its national importance will be considered from two points of view: That of interstate commerce and that of copper production.

Interstate commerce.—The records of the Sault Ste. Marie Canal afford precise data from which to judge of the extent and nature of the commerce of Lake Superior. The following figures exhibit the freight which has passed through the canal during the past five years:

Years.	Registered tonnage.	Actual freight.
	Tons.	*Tons.*
1881	2, 092, 521	1, 567, 741
1882	2, 468, 083	2, 020, 521
1883	2, 042, 259	2, 267, 105
1884	2, 997, 837	2, 874, 557
1885	3, 035, 937	3, 256, 628

The increase during 1886 has been enormous, and, according to present indications, will amount at the close of the season to fully 4,500,000 tons of actual freight moved almost exclusively by steam. According to the official report, the Suez Canal itself only passed 5,871,500 net tons in 1884.

There are few ports on the northern shore of Lake Superior at which our vessels find it profitable to trade. They naturally hug the southern shore, on which are situated the centers of the iron, copper, and lumber industries; where are imported immense supplies of coal, lime, building materials, machinery, provisions, and supplies of every kind, and where are exported iron, copper, and lumber. At Duluth and Superior City the exports of grain and imports of every kind needed to develop the new region opened by the Northern Pacific and other railroads swell the traffic to the enormous and increasing figures given above. Keweenaw Point, as already stated, juts far out into the lake and obstructs this natural route of trade.

Again, the prevailing storms of the Lake Superior region are from the northwest and the northeast. The natural route of commerce near the southern side lies, therefore, throughout its whole extent along a lee shore. During the summer months navigation is usually safe, but in the spring, when the winter accumulations of iron, copper, and lumber demand prompt shipment, and in the autumn, when the wheat crop is pouring from the great Northwest, the lake is stormy and dangerous. Harbors of refuge are urgently needed, not only to save life and property, but also to prevent delays and afford that certainty of rapid transit upon which the low price of freights depends. A vessel liable to be compelled by an approaching storm to linger among the Apostle Islands, it may be for days, before daring to encounter the perils of rounding Keweenaw Point, "the Cape Horn of Lake Superior," must charge accordingly. The distance to be traveled before reaching the next harbor of refuge, Marquette, is fully 225 miles, and the whole commerce of Lake Superior is subjected to delays and corresponding increase of rates of freight by the lack of intermediate shelter.

The Board is under obligations to Mr. E. T. Evans, general manager of the Lake Superior Transit Company, Buffalo, N. Y., for a list of casualties on this iron-bound coast between the years 1847–1886. This document, appended, marked A, exhibits what have been the dangers in the past, and affords data for estimating what they may be expected to be in the future, with the vastly increased shipping now engaged in the traffic. The aggregate loss already reaches two hundred lives and $2,359,340.

Portage Lake, about midway between Marquette and Ashland, would be a perfect harbor of refuge if a western entrance from Lake Superior were provided safe to enter during storms; at present no such entrance exists.

It appears from the foregoing facts that, partly to remove the obstruction offered by Keweenaw Point and partly to secure a needed harbor of refuge, the construction of a ship-canal to perfect the Portage Lake route would now be urged by the navigation interests of the lakes even if private enterprise, aided by the Government, had not already begun the improvement. That there is now a lively interest felt in the matter throughout the whole lake region is apparent from the communications from leading commercial organizations appended, and marked B and C, the former addressed to the Board, the latter received in response to a circular letter.

Copper production.—The national importance of the great copper mines of Lake Superior requires no demonstration. The Calumet and Hecla mine alone furnishes one-tenth of the world's annual production. The following official statement exhibits how rapidly the industry is developing:

Refined copper from Lake Superior mines.

Years.	Net tonnage.	Value in New York.
1855	2,904	$1,586,160
1860	6,034	2,654,960
1865	7,179	5,635,515
1870	12,311	5,096,752
1875	18,019	8,180,626
1880	24,869	9,947,673
1885	36,093	.....

By far the largest portion of this product is mined in the vicinity of Portage Lake and shipped directly from Hancock and Houghton; even the copper shipped at the small ports of Ontonagon, Eagle Harbor, and Copper Harbor is brought to the same place for smelting. The whole annual production of Lake Superior copper is thus compelled to pass through the Portage Lake route and pay a tax to the canal companies before it reaches the free waters of the United States. But this is not all. The region is productive only in minerals, and there are no manufactures. A few potatoes and a little hay form the sole crops. The food supplies and all manufactured articles for the use of a mining population of about 30,000 persons, to say nothing of the coal, lime, and other materials used in producing the copper, are received through the same Portage Lake route, and are subjected to this same tax. The recent extension of the railroad from L'Anse has not, as we are informed, afforded relief. The annual exports and imports at Houghton and Hancock are reported to the Board as probably exceeding $12,000,000, of which 95 per cent. pertains to States other than Michigan. Precise figures on which to base these estimates were not presented, but the statement was made to the Board at a public meeting of leading citizens and was indorsed by all the business men present.

There is thus presented a singular anomaly in American practice; a great national industry situated on navigable waters of the United States, taxed for interstate commerce in the persons of every man, woman, and child engaged in the production, and taxed twice—once for the product, and once for every necessary of life.

The iron industry is not thus handicapped at the neighboring cities of Marquette and Escanaba, where good harbors have been provided by the General Government free from all charges to those engaged in the production.

HISTORY OF THE PORTAGE LAKE CANALS.

(1) *Portage River improvement.*—By the year 1859 the copper interests centering in Portage Lake had acquired an importance that rendered improved facilities for transportation a necessity. At the mouth of Portage River there was a depth of from 3 to 5 feet over the bar. Vessels arriving there were anchored in the offing, freight was transferred by lighters to docks inside the bar and there again transferred to scows upon which it was towed to the mines, a distance of about 14 miles, at a cost of $4 per ton. The expense, delay, and annoyance at-

tendant upon this method of procedure led those who suffered therefrom to attempt a remedy by dredging the river and bar and constructing a breakwater. The sum of $30,000 was raised by subscription; the contributors being the Quincy, Pewabic, Franklin, Mesnard, Pontiac, Saint Mary's, Albany and Boston, and Isle Royale Mining companies, and two merchants and land owners, Messrs. Sheldon and Douglas. Mr. John H. Forster was employed as engineer, and a contract was made with Mr. W. W. Williams for securing a channel 10 feet deep and 80 feet wide at bottom. Instead of using the original river mouth the engineer selected a point further to the east, where he laid out a breakwater and a canal leading to it through a tamarack swamp, the length of cut being 1,200 feet. The object of the breakwater was to prevent the sand moved by northeast storms from filling up the mouth of the canal. Only one pier was considered necessary. It was built during the winter of 1859–'60, the cribs being constructed upon the ice and then sunk and the stone hauled from the quarry upon sleds, the thermometer often running from 20° to 30° below zero. In the month of June, 1860, the first lake steamer was piloted through the canal and river up to the docks in Hancock, though the contract for the improvement was not completed until the autumn of that year. This work was done without the authority of law.

In the following year an act was passed by the Michigan legislature to provide for the formation of companies to construct canals or harbors and improve the same, which act was approved and became law March 13, 1861. Under this law the Portage Lake and River Improvement Company was incorporated, being composed of the persons who had begun the improvement. They were authorized to charge tolls upon all vessels drawing more than 5 feet, the rates being fixed by Houghton County.

The improvement thus far made, great as it was, was very far from being complete. Considerable sums, the exact amounts of which are known only to the company, were expended annually in maintaining and deepening the channel, straightening the river, and placing buoys and beacons. As the trade of the locality increased, greater facilities were called for in the use of the water-way. As early as 1865 a depth of 13 feet was called for. In 1874 extensive additional dredging was begun, the object being to obtain a channel depth of 13 feet. In 1875 the old pier was widened and a new superstructure constructed, the old foundation remaining intact then as it does now. Dredging has been continued annually. The income from tolls also increased annually, enabling the corporation to provide for these additional expenses and at the same time to have a handsome profit remaining.

In 1879 the Michigan legislature passed an act, approved May 22, under which any county in which the greater part of a canal or improved river may pass is authorized to purchase such canal or improvement, paying to the improvement company the amount of its capital stock and the amount of all subsequent expenditure in repairs and alterations, with interest at 10 per cent., but deducting from the amount of interest the net proceeds of the improvement.

Of late years pressure has been brought to bear upon the company to reduce the tolls. In 1885 the rates of toll were reduced by nearly 50 per cent. below what they had been up to that time since 1863. The demand now is that the tolls shall be removed altogether and that the water-way shall be further enlarged.* None of the original stock-

*An interesting letter from Mr. John H. Forster, from which much of the foregoing information has been obtained, is hereto appended, marked D.

holders now hold any interest in the corporation, and we are informed that the property is now owned entirely by persons non-residents in the district.

(2) *Lake Superior Ship Canal, Railway and Iron Company.*—The opening of Portage Lake, by means of the improvement of Portage River, to vessels navigating Lake Superior, enabled them to go within a trifle over 2 miles of Lake Superior on the west side of Keweenaw Point. The advantage which would accrue from making the water-way continuous from the east side to the west side of Keweenaw Point was obvious, but it involved the construction of an artificial canal 2 miles long, with a breakwater at its entrance from Lake Superior. The expense of such a work was beyond the means of the persons immediately interested in the local trade of Portage Lake, and the benefits to result from it would be national rather than local, while the returns to be expected from the tolls would probably not pay interest upon the investment for many years.

A corporation entitled the Portage Lake and Lake Superior Ship Canal Company was organized under the State laws in 1864, its articles of agreement being filed with the secretary of state of Michigan July 15, 1864. By a joint resolution of the Michigan legislature dated January 21, 1865, Congress was asked to aid the enterprise by a grant of land. The Minnesota legislature passed a resolution to the same effect February 24, 1865. Congress responded by granting to the State of Michigan, by the act approved March 3, 1865, 200,000 acres of land. By act approved March 18, 1865, these lands were conferred by the State upon the above-mentioned corporation, with certain conditions. A plan of construction was then adopted, which was more expensive than had at first been contemplated. Additional aid was sought from Congress by the Governor and Representatives of Michigan. The legislatures of Wisconsin and New York passed resolutions February 27, 1866, asking Congress to aid the enterprise. A number of cities also sent in petitions to the same effect. Congress again responded by granting 200,000 additional acres of land by act approved July 3, 1866.

The canal was to be 13 feet deep and 100 feet wide, and to be provided with a breakwater at its Lake Superior end. For several years operations were limited to surveying the ground, procuring machinery, and the exploration of lands to be selected under the grant. The original surveys and plans were made by Mr. I. N. Greene, engineer for the State. It was not until 1868 that the work of excavation was actually begun, and at the end of that year only a few thousand yards had been excavated. In the spring of 1869 the work was resumed with great activity, and was vigorously pushed during that and the following year. Mr. John H. Forster superseded Mr. Greene as engineer for the State June 1, 1869. In 1871 the work was embarrassed for want of funds, and made unsatisfactory progress. The title of the company was altered to Lake Superior Ship Canal, Railroad and Iron Company. In this year the company failed, and a receiver was appointed by the United States Circuit Court in Michigan, with authority to borrow money for the purpose of completing the canal. The work advanced slowly during the two following years.

The act of Congress making the first grant of land required that the works should be completed by March 3, 1867. The act making the second grant extended this time three years, or to March 3, 1870. The time was subsequently extended to March 3, 1872, and again to March 3, 1873, and finally to December 1, 1873. On the 18th of October, 1873, the State engineer, Mr. Forster, certified that the works were completed

according to law, and on the 29th of November, 1873, the Governor of Michigan certified that the works were built according to law, but that, the title to the lands upon which they were situated being vested in the officers of the company as individuals, and not in the company itself, he did not consider the works completed in accordance with the act of Congress. It was not until June 25, 1875, that the Governor gave his final certificate that the works were completed, the delay being caused by the transfer of legal title required by him. Technically, therefore, the works were completed in 1875, but as a matter of fact they were completed in 1873.

In May, 1877, after protracted litigation, the property was sold under decree of foreclosure. It was purchased by Messrs. Mann and Wilson, for the bondholders and creditors of the old company, who organized the present company, under the title of Lake Superior Ship Canal, Railroad and Iron Company. The consideration mentioned in the deed to Mann and Wilson was $870,000. In the deed from them to the new company the consideration was $100, subject to prior incumbrances amounting to $1,636,385 and accrued interest at 10 per cent. The present company had no connection with the old company.

This canal, independently of the lands attaching thereto, has not proved a financial success. The income from tolls has been almost wholly expended in keeping it in repair.

PRESENT CONDITION OF THE IMPROVEMENTS.

The lake survey charts of this vicinity were prepared before the improvements had been completed, and no accurate survey of the canal and Portage River improvements had ever been made. Moreover the stamp-mill deposits have largely encroached upon Portage Lake, and demand, in the interests of navigation, immediate attention. For these reasons the Board has caused to be made a careful examination and survey (with borings where necessary) of all parts of the route where work is likely to be required by any project for further improvement. This work was promptly and well done by Mr. G. A. Marr, formerly assistant engineer on the survey of the lakes, aided by an efficient party, and the results appear upon four maps, three of them drawn upon a scale of $1'' = 400'$, and one upon a scale of $1'' = 100'$. They are forwarded with this report. Mr. Marr's detailed report is appended, marked N.

The following description of the route is based upon the notes of this survey, and upon a personal inspection made by the Board in October, 1886.

In considering the navigable depth of the canal as indicated by the soundings, oscillations of the lake surface cannot be neglected. A continuous gauge record has been kept above the locks at Sault Ste. Marie since November, 1870, which shows that beside the temporary and irregular changes of level due to winds there is an annual and an abnormal oscillation. In consequence of the former the water-surface is usually about a foot higher in the months of July, August, and September, than in the months of February, March, and April, the change occurring principally in the intermediate months. The gradual abnormal oscillations often cover several consecutive years, as appears from the records for sixteen years at Sault Ste. Marie, furnished by General Poe, appended, marked E. The extreme oscillation during the fifteen years has been 3 feet, occurring between September, 1876, and March, 1880.

During the progress of the surveys ordered by the Board a daily gauge record was kept in Portage Lake. To connect this with the levels of the lake survey a comparison was made, during calm weather, on November 9, 1886, with the nearest bench-mark (at Marquette). The water there stood 601.32 feet above sea-level. The corresponding elevation at Sault Ste. Marie was 601.62. Upon this basis the average stage of water at Portage Lake during the survey was assumed at 601.4 feet above sea-level. The corresponding mean level at Sault Ste. Marie (601.62) was 0.36 foot below the grand mean for October and November during sixteen years. The maximum oscillation at Portage Lake during the survey was 0.6 foot 0.3′ above, and 0.3′ below the average stand, but these readings were only temporary.

Portage Lake.—Of the 24 miles covered by this route about 16 miles traverse Portage Lake. This is a long and narrow sheet of water, with a depth usually varying from 30 to 40 feet, and presenting no natural obstacle to any class of vessels ever likely to navigate Lake Superior. The width is rarely less than 1,000 feet, the banks are usually high, affording perfect protection against gales. In a word, after an entrance has been effected, no better harbor of refuge could be desired.

Two artificial obstructions to navigation exist. A low railroad and viaduct bridge between Houghton and Hancock, with a center pivot-draw affording only 68 feet clear space; and eight projecting masses of deposit from the stamp-mills—five from the Atlantic, Huron, Franklin, Quincy, and Pewabic, now in active operation. Information upon this subject has already been called for by Congress and reported upon by Maj. H. M. Robert, Corps of Engineers, House Ex. Doc. 85, Forty-seventh Congress, second session.

The Board was informed that the second section of the river and harbor act of August 5, 1886, was urged upon Congress with special reference to abating these stamp-mill deposits which, unless checked, must soon destroy the value of the lake as a route for through commerce. Our survey was therefore extended (Map No. 2) to cover the entire region affected by them, and proposed harbor lines have been indicated thereon for the action of the Honorable Secretary of War. The necessity of at once putting a stop to these deposits cannot, in our judgment, be too strongly stated if this route is to be made a national highway for the commerce of the lakes.

Portage River.—Portage Lake is connected with Keweenaw Bay by a river now artificially shortened to about 5 miles in length (see Map No. 3.) Originally it was tortuous and obstructed by two bars, one at its exit from the lake and the other at its entrance into the bay. Only from 3 to 5 feet could be carried over these bars, although for long distances the natural channel was much deeper. At present by dredging and cutting off points, a navigable and tolerably straight channel averaging over 100 feet in width, with a minimum depth of 14 feet, has been secured. The banks are low, and no revetment has been placed to preserve the cuts.

For the harbor entrance at Keweenaw Bay a single pier has been built, projecting 675 feet from the shore line to 14 feet of water. It was originally made of a single row of timber cribs 12 feet wide, loaded with stone; but a second line was subsequently added, so that now the width is from 25 to 30 feet. While not an elegant construction, it serves the immediate needs of commerce in the comparatively sheltered position it occupies, and the Board heard no complaints as to dangers encountered at this entrance in storms.

As already stated, all the improvements in this part of the route have been made without cost to the Government, by private enterprise. No outlay has been made to secure a title to the bed of the river, but the sites of the cuts have been purchased by the company, and it is proposed to transfer a clear title to them, as set forth in the statement appended, and marked F.

The ship-canal.—This canal is 2.1 miles long. Our soundings indicate a depth of 14 feet throughout its whole extent. The least width at water-surface is 100 feet, widening to over 200 feet in the Lily Pond, and thence maintaining 100 feet nearly to Portage Lake. The southern half (near Portage Lake) traverses a swampy region, where no especially difficult work is required for enlargement. The northern half involves more outlay in its extension through an old tamarack swamp and a range of sand ridges 30 feet high with a hardpan bottom outcropping near Lake Superior. Enlargements here would be more expensive.

Throughout the whole extent of the canal its revetment consists of a front row of piles generally about 6 feet apart from center to center, capped a few inches above the water-surface to support a single row of sheet-piling; a row of anchor piles is driven about 7 feet back and connected with the front row by timber braces. The piles seem generally to be well preserved, but the caps are often decayed and the sheet-piling requires frequent repairs to maintain it in position. The superintendent, Mr. Pryor, states that experience has shown that where the route traverses sand-hills double the number of piles should be used and a double sheet-piling should be driven. As now built, if the space behind is solidly packed the piles are pressed out of position; if it be left open, the waves entering the canal in storms tear off the sheet-piling.

Harbor entrance at Lake Superior.—The entrance to the canal is formed by two approximately parallel piers of subsantial crib-work which have resisted the storm waves and ice floes in a satisfactory manner since completed in 1873. The hardpan bottom of indurated clay upon which they rest has been of marked advantage in preserving their stability. These piers, 1,000 and 850 feet long, are of timber and stone of the usual pattern. They are 100 feet apart at the shore-line, widening irregularly to 240 feet at the lake entrance, where the depth at the date of our survey was 20 feet. Annual dredging is necessary here. The ice during the winter is said to pile up in a solid mass forming an artificial shore-line which tends to cause accumulations, and thus aggravates the usual creeping of sand round the ends of the piers.

The problem of constructing an entrance to the canal safe for large vessels during the great storms which prevail on Lake Superior in the spring and autumn is a difficult one. The tops of the present piers rise 6 feet above the surface of the lake when calm. The Board visited the place during a moderate gale from the westward on October 20. The rollers were coming in with their solid crests fully up to the top of the cribs. Where the defective trace presented surfaces normal to the direction of motion, spray was thrown many feet into the air and solid water poured over the wood-work in large volumes. The wave oscillation extended into the canal quite perceptibly for 300 or 400 feet. We were informed that in the great northeast and northwest gales, when the wind blows more directly in the line of the canal, wave motion is felt half a mile from the lake.

If a harbor of refuge is to be made at this place, it is a matter of vital importance to render the canal entrance safe in storms. A report upon the subject by Major H. M. Robert, Corps of Engineers, will be found in Senate Ex. Doc. No. 32, Forty-sixth Congress, second session.

VALUE OF THE IMPROVEMENTS.

The importance of this work to the general commerce of the lakes, and its necessity for extending and developing the production of copper in the Lake Superior mines, have already been considered. It remains to determine what is a fair recompense to the present proprietors for the improvements and franchises which they proposed by letters to General Poe, dated November 22 and December 1, 1884 (Senate Ex. Doc. No. 15, Forty-eighth Congress, second session), to transfer to the Government free of all incumbrances for the sum of $350,000, and which proposition was renewed verbally to the Board by Mr. J. H. Chandler, the attorney of the companies, at a meeting of the Board on October 18, 1886.

There are three modes of approaching this subject: (1) What interest upon this sum of $350,000 is now and probably will be paid by the net revenues to which the company are entitled by law; (2) to what extent will the works and property proposed to be transferred to the Government reduce the cost of the improvements needed by commerce; (3) what has been the actual investment of private funds over and above the amount already contributed by the Government, viz, the value of the 398,205.42 acres of public lands donated to aid "in the constructing and completing a harbor and ship-canal"? Each of these questions will be considered in turn.

(1) The legal tolls of the two corporations are regulated differently. Those of the Lake Superior Ship Canal Railway and Iron Company are established by the State Board of Control, under the provisions of an act of the State of Michigan, approved April 25, 1873. Those of the Portage Lake and River Improvement Company are fixed by Commissioners appointed by the Board of supervisors of Houghton County. The rates of authorized tolls are shown by printed statements, of which copies are appended marked G and H, respectively.

From Exhibit P, appended to House Mis. Doc. No. 50, Forty-eighth Congress, first session, it appears that the total expense for improvements and repairs of the Lake Superior Ship-Canal from 1874 to 1883, inclusive, was $70,146.79. These expenditures are exclusive of salaries or other expenses incidental to maintenance of organization. The total receipts of tolls and all income from canal and other sources connected with its operation was $75,053.13; leaving, probably, no net profit.

Mr. James Pryor, superintendent of the canal, supplements this exhibit by the following figures extracted from his statement appended and marked I:

Income from season of—	
1884, from tolls	$9,585 08
1885, from tolls	10,115 50
1886 (to September 30)	6,439 88
	26,140 46
Expense for repairs, dredging, and superintendence in—	
1884	8,368 20
1885	5,997 92
1886)to September 30)	5,000 00±
	19 366 12

showing a total net income from the beginning of the season of 1884 to the end of September, 1886, of $6,774.34.

These figures indicate that, considering the large sums expended in its construction, the canal has thus far proved, financially, a failure. No office expenses other than those at Houghton are included in these figures, and a net profit of $1,000 per annum would be a large estimate, even with the increased traffic to be expected in the near future.

The exhibit of the Portage Lake and River Improvement Company is more favorable. From Mr. Pryor's statement, appended and marked K, it appears that the total expenditure from 1872 to 1885, inclusive, including repairs, dredging, and superintendence, was $120,755.71, of which $75,118.72 was for dredging and $10,598.74 for pier work and cribs. The annual expenses of this company may therefore be estimated at about $8,500.

The freight business of this company for 1884, 1885, and to October 12, 1886, and its gross income for 1884 and 1885 are exhibited by Mr. Pryor's statements appended and marked L and M. The latter, for 1884, is given as $33,968.01, and for 1885 $26,142.08. The falling off was caused by the permanent reduction in tolls which took effect in 1885. The net annual income over expenses from the investment represented by the Portage River improvement is therefore, at current rates, about $17,500.

From the foregoing figures it appears that the two improvements which the companies propose to transfer to the United States for $350,000 now yield them an annual net income of about $18,500, and that lake commerce in the future may be expected to increase rather than diminish these figures. But to avoid loss at this price the funds received in payment must be reinvested so as to yield a little over 5 per cent. annual interest ($18,500 is 5 per cent. upon $370,000). The proposition of the companies seems, therefore, to be fair and reasonable.

(2) As to the money value of the existing works in reducing the outlay for such improvements as are now demanded by the needs of commerce at this locality, no definite estimate can be made until the details of such improvement are determined; but it is certain that the Government, from this point of view, also will receive a fair equivalent for the price asked by the companies. The works, as they now exist, could not be constructed for that price, and, consisting largely of needed excavation, they will not be sacrificed to any great extent.

(3) What sums have been actually expended upon the canal and harbor on Lake Superior cannot now be determined with precision. The subject was investigated by General Poe in 1884, and reported upon by him in Senate Ex. Doc. No. 15, Forty-eighth Congress, second session. After all the new study which it has been possible to give to the subject, the Board agrees with General Poe in his conclusion that "the probability is great that the aid supplied from all sources and applied to the construction and repair of the canal and in operating it down to the beginning of 1884 amounted to fully $3,000,000." The whole of this sum was raised by the company from private sources, except what accrued from the donation of 398,205.42 acres of public lands actually received from the General Government under the grants of 400,000 acres. At the time the title was transferred this was wild land, worth in the market $1.25 per acre, making the money value of the grants amount to $497,756.77. It is reported that some of these lands have since proved to be mineral lands and very valuable, but what bearing this has upon the present question is not apparent. Indeed, the terms if Senate resolution of inquiry of April 22, 1884, which recites that the value of this land shall be estimated at $1.25 per acre, is regarded by the Board as fixing the proper valuation at the above amount.

The amount of work done by the Portage Lake and River Improvement Company to the end of 1883 is stated with considerable precision in a letter of Mr. S. W. Thurlow, secretary of the company, contained in Appendix C to General Poe's report. Since that date the superintendent, Mr. Pryor, states that 41,870 cubic yards have been dredged, making a total of 813,707 cubic yards to date; but the company has avoided furnishing accurate information as to the cost of the work. The price has varied from 90 cents for hardpan and bowlders and 30 cents for sand, paid in 1862–'63, to about 25 cents subsequently. Assuming 40 cents as a fair average, the company has expended upon dredging alone about $320,000, a very large portion of this being for maintenance and not construction. When the cost of the pier, 950 feet long, land purchases, &c., are taken into account, it would seem that the whole price now asked for both improvements cannot very largely exceed the private funds actually invested in one of them by the Portage Lake and River Improvement Company.

In fine, the Board is of opinion that the price asked for the existing improvements is just and reasonable. The investment has greatly benefited commerce and the mining interests. The franchises now owned by the corporations have been legally and fairly acquired, but they bear heavily upon commerce and especially upon the population of Houghton County, and the companies seem willing to yield to the popular demand for a free water-way so soon as they are protected against actual loss themselves. The pressure for the purchase does not originate with the owners of the property, but with the mining population and the general commerce of the lakes.

RECOMMENDATIONS.

The Board, after careful consideration of the subject in all its bearings, and in the light of all the information it has been able to collect, submits the following recommendations:

(1) That the offer of the companies be accepted, to transfer all right and title to the canal, the work of improvement on Portage River, the harbor works upon Lake Superior and Keweenaw Bay, with all lands and franchises connected therewith, free from all incumbrances and involving no other payments for bonds or otherwise whatsoever, for the gross sum of $350,000.

(2) That the route be made a free water-way of the United States, subject to no tolls or assessments whatever, and be placed upon the same footing as to maintenance as the Louisville and Portland Canal.

(3) That under the authority conveyed by section 2 of the river and harbor act of August 5, 1886, the harbor lines indicated upon accompanying map No. 2 be approved by the Honorable Secretary of War; that the Engineer officer in whose district this water-way is situated be instructed to inspect from time to time and report any and all infringements thereon, and that the proper legal means be adopted for abating any such infringements in the future.

The existing bridge would be a very serious impediment to navigation if this route were improved to an extent to justify its use by the entire commerce of Lake Superior; and the same may be said of the existing deposits from the stamp mills. Appropriate legislation is recommended.

(4) That a navigable depth of 16 feet at the lowest known lake level, with a minimum width of 70 feet on the bottom, be obtained by dredg-

ing throughout the entire extent of the water-way. This will involve the removal of 285,000 cubic yards of sand and hardpan in the canal, at a cost of $99,000, and 149,000 cubic yards, mostly of soft material, in Portage River, at a cost of $30,000. To this should be added about $75,000, roughly estimated, for putting the existing revetment in the canal in serviceable condition, calling for a total appropriation of, say $225,000, including contingencies.

Should the future needs of commerce demand an increase in navigable depth to 20 feet at the lowest known lake level, it is probable that an increase in width of at least 50 feet will also be necessary, involving new revetments, for which an estimate of $200,000 would probably not be excessive; the excavation would amount to 989,000 cubic yards of hard and soft material in the canal, at a cost of $350,000, and 782,000 cubic yards in Portage River, mostly of soft material, which will cost $180,000.

(5) That the harbor entrance on Lake Superior (Map 4) be advanced into the lake to a depth of 30 feet by two piers of crib-work loaded with stone; that the new entrance thus made be 400 feet in width and situated in front of the present entrance; that the piers diverge inwardly upon angles of 45° with the axis of the canal to afford interior space to reduce the waves, and that their inner ends be connected with the shore by low piers rising only to the ordinary lake surface, with a view, while excluding sand, to facilitate the escape of waves entering the harbor in storms. Such an entrance would involve 3,940 feet of high piers, at a cost of $689,000, and 1,400 feet of low piers, at a cost of $70,000, calling, with contingencies, for an appropriation of, say, $850,000.

(6) That the pier at the Keweenaw entrance be extended to reach water 20 feet in depth by ordinary crib-work, about 2,400 feet long, which, with contingencies, will call for an appropriation of, say, $220,000.

RECAPITULATION.

For extinguishing private franchises	$350,000
For opening a through route having a minimum depth of 16 feet and a minimum bottom width of 70 feet	225,000
For providing a safe entrance from Lake Superior	850,000
For providing a safe entrance from Keweenaw Bay	220,000
	1,645,000

When the increasing needs of commerce demand a depth of 20 feet an additional expenditure of $730,000 will be required.

Respectfully submitted.

HENRY L. ABBOT,
Colonel of Engineers,
Bvt. Brig. Gen., U. S. A.
O. H. ERNST,
Major of Engineers.
CHAS. J. ALLEN,
Major of Engineers.

Brig. Gen. J. C. DUANE,
Chief of Engineers, U. S. A.

APPENDIX A.

CASUALTIES ON SOUTH SHORE OF LAKE SUPERIOR.

LAKE SUPERIOR TRANSIT COMPANY,
Buffalo, N. Y., November 23, 1886.

SIR: Your letter of 6th instant, asking for a list of casualties on and near Keweenaw Point, was duly received, but I had much difficulty in obtaining the necessary information. I have tried in several directions, but all that I have been able to secure is the inclosed paper, prepared by Capt. J. W. Hall, a marine reporter of Detroit, who for the last forty years or more has aimed to keep a record of all marine disasters occurring on the Great Lakes. From his papers he has made up this record of shipwrecks and loss of life on the south shore of Lake Superior from 1847 to 1885, inclusive. These losses aggregate, as per his figures—

Losses on hulls	$1,804,640
Losses on cargoes	554,700
Total	2,359,340
Lives lost	200

His record does not separate from the rest the losses off Keewenaw Point, but the main portion of the losses on the south shore of Lake Superior always happen here. It is the most dreaded portion of the route. Storms are frequent here in the spring and fall, the locality is most dangerous, and there is *no* available harbor of refuge anywhere on the south shore.

I have had picked out from this list, as well as can be done by memory after a lapse of forty years, such of these losses as might have been avoided or mitigated had there been a harbor of refuge at or about the present Portage Lake Canal outlet, on the northwest side of Keewenaw Point. These I have marked thus (V). We have been able, of course, to check but a small portion of them. Among the larger losses which I can so check without hesitation are the steamer Sunbeam, foundered off Eagle River, in 1863, with a loss of thirty-two lives; also the steamer Manistee, lost in the same way in the autumn of 1883, with a sacrifice of twenty-three lives. She was seen off the canal on the morning after she last left Bayfield, but the sea was too heavy for any boat to enter the canal in its then condition. The loss of the schooner Merchant, in 1847, may be questionable as to locality, but she was bound for Eagle Harbor and Eagle River, on the north side of Point Keweenaw, and it is a well-known fact that neither Eagle nor Copper Harbor is a desirable or safe shelter to run for in heavy weather. I also think it safe to say that the loss of the propeller Scotia, valued at $80,000, would have been avoided had the two Portage canals been free and in good condition for general use.

The present risk to commerce on Lake Superior is, of course, very inadequately shown by Captain Hall's list. This traffic has increased enormously in the last few years, and the vessels engaged in it are constantly getting to be larger and more valuable. You will note this tendency even in these figures of losses.

I have referred only to accidents bearing upon the importance of a harbor of refuge at the northern entrance of the Portage Canals, which, though very desirable for the preservation of life and property, would be incomplete, and to a great extent short of its general usefulness, unless the lower canal be made equal to the upper for purposes of shelter, &c., so that vessels entering at either end may pass the Cape Keweenaw, thereby shortening their route and often putting them in position to continue their voyage when they might otherwise be delayed or in trouble outside. The present indications are that the value of such harbors would have been most fully demonstrated during the terrible storms that have visited Lake Superior for the past few days, causing serious disaster to vessels and cargoes.

Any further information which I can give you, or can get for you in any way, I shall be very glad to attempt.

Yours truly,

E. T. EVANS,
General Manager.

General HENRY L. ABBOT,
Colonel of Engineers.

LAKE SUPERIOR TRANSIT COMPANY,
Buffalo, N, Y., November 27, 1886.

SIR: Referring further to my letter of 23d instant, I would add that Captain Dunn, of our steamer Arizona, informs us that on his last trip he met the schooner Lucerne, bound down, loaded with iron ore from Ashland, between Eagle River and the Portage Canal (Lake Superior Ship Canal Railway and Iron Company); which vessel was

lost, with all hands, on or about Chequamegon Point, some hours after, in running back from the furious gale in which she as well as the *Arizona* and other craft was caught, and in which the safety of the *Lucerne* might and probably would have been secured had there been a proper free harbor of refuge at the canal. As it is, some ten lives and a commercial value of some $30,000 or more have been lost. You will note that this money loss is about one-tenth of the sum asked for the two Portage canals.

Yours truly,

E. T. EVANS,
General Manager.

General HENRY L. ABBOT,
Colonel of Engineers.

Shipwrecks and loss of life on south shore of Lake Superior.

Year.	Name of vessel, cargo, &c.		Hull.	Cargo.	Life.
1847	Schooner Merchant, supplies, foundered with all on board, passengers and crew	v	$5,000	$4,000	14
	Schooner Ocean, supplies, damaged in a gale		4,000	3,000	1
	Steamer Julia Palmer, supplies, ashore and total loss at Two Heart River		30,000	25,000	.....
1851	Propeller Manhattan, supplies, sunk by propeller Monticello in midlake, got up		9,000	1,000	.....
	Same steamer stranded on a reef, not noted		300	.....	.....
	Same steamer, supplies, threw over cargo in a gale		500	300	.....
	Propeller Monticello, copper, wrecked in a gale and total loss	v	30,000	10,000	.....
1852	Steamer Baltimore, supplies, damaged in a gale and lost cargo		4,000	500	.....
	Propeller Independence, supplies, ashore in a gale		20,000	10,000	.....
1853	Steamer Baltimore, supplies, ashore at White Fish Point		2,000	300	.....
1855	Steamer Planet, disabled in a gale, broke her shaft, and towed to Detroit		2,000	.....	.....
1856	Steamer Planet, disabled in a gale, towed into port		1,500	.....	.....
	Steamer Illinois, broke her shaft in a gale and towed into Detroit		2,000	.....	.....
	Steamer North Star, disabled in a gale and towed to Cleveland		2,000	.....	.....
	Schooner Vanguard, sprung a leak in a storm		500	.....	.....
	Propeller B. L. Webb, ashore and took fire in Waiska Bay		50,000	15,000	1
	Steamboat Superior, supplies, wrecked in a storm and all lost		15,000	10,000	35
1857	Steamer Illinois, disabled in a gale and towed to Detroit		1,500	.....	.....
	Propeller General Taylor, disabled in a storm and towed to Detroit		1,000	.....	.....
	Schooner Lamplighter, stranded on a reef near White Fish		300	.....	.....
	Propeller Detroit, broke her shaft and towed into Marquette		1,800	.....	.....
	Propeller City of Superior, wrecked at Eagle Harbor in gale; total loss	v	47,000	3,000	.....
1858	Propeller Indiana, ore, sprung a leak and sunk		10,000	4,000	.....
	Steamer Lady Elgin, in a gale run for Copper Harbor and stranded	v	8,000	.....	.....
	Steamer Illinois, ashore in a gale at Copper Harbor	v	1,200	.....	.....
	Steamer Lady Elgin, stranded on Sauble Reef		1,400	.....	.....
	Bark American Republic, disabled in a gale and reached Grand Island		400	300	.....
	Propeller Ontonagon, disabled in a storm	v	2,000	.....	.....
	Propeller Mineral Rock, threw over 20 tons of copper in a gale	v	500	2,500	.....
	Propeller General Taylor, collided with brig Concord at White Fish Point		500	.....	.....
	Brig Concord, damaged by said collision		2,300	.....	.....
1859	Steamboat Miner, wrecked at Ontonagon; total loss		2,000	.....	.....
	Schooner B. Parsons, damaged by collision off Eagle River		500	.....	.....
	Schooner Susquehanna, ashore in a gale near Marquette		3,000	400	.....
	Steamer North Star, supplies, damaged by storm off Eagle Harbor	v	500	1,700	.....
	Schooner Challenge, ore, damaged and lost cargo in gale		500	400	.....
	Schooner Resolution, copper, stranded near Ontonagon and sunk	v?	1,000	300	.....
	Propeller Manhattan, merchandise, wrecked in a gale at Grand Marais		10,000	8,000	.....
	Schooner Ethan Allen, ore, ashore in a gale at Copper Harbor	v	1,500	500	.....
	Schooner Coaster, supplies, ashore in a gale and total loss		3,000	1,000	.....
	Schooner Dream, capsized in a gale		2,000	400	2
1860	Steamer Arctic, stranded on Huron Island; total loss		30,000	4,00	.....
	Schooner G. W. Ford, ashore at Minnesota Point		600	.....	.....
	Propeller Iron City, disabled in a storm		2,000	.....	.....
	Schooner Neptune, ashore in a gale on Minnesota Point		400	.....	.....
	Schooner Huntress, disabled in a storm		500	.....	1
	Steamer Gazelle, in a gale wrecked near Eagle Harbor	v	30,000	500	.....
	Propeller General Taylor, stranded in a storm at Ontonagon		900	.....	.....
	Steamer Seabird, disabled in a gale and towed to Detroit		4,000	.....	.....
	Steamer Illinois, stranded in a gale at Eagle Harbor	v	500	.....	.....
	Steamer City of Cleveland, damaged in a gale and threw over cargo		7,500	9,500	.....
1861	Propeller F. W. Backus, supplies, damaged in a gale off Copper Harbor	v	2,500	1,500	.....
	Steamer Illinois, lost a wheel in a storm off Eagle River	v?	1,500	.....	.....
	Propeller Iron City, damaged by heavy weather off Portage	v	500	.....	.....
	Steamer Michigan, lost a man overboard in a gale		.....	.....	1

Shipwrecks and loss of life on south shore of Lake Superior—Continued.

Year.	Name of vessels, cargo, &c.	Hull.	Cargo.	Life.
1862	Propeller Water Witch, machinery disabled off Eagle Harbor	v $1,500	.....	.....
	Steamer Illinois, damaged by collision with schooner Oriole	1,600	.....	.....
	Schooner Oriole, ore, sinks by said collision	11,000	$6,000	12
	Schooner Exchange, ore, damaged and lost deck-load in gale	1,000	500	.....
	Steamer City of Cleveland, collided with propeller Northern Light	1,500	.....	.....
	Steamer Cleveland, supplies, ashore and damaged	4,700	2,000	.....
	Schooner Sunbury, ore, damaged in gale and towed to Buffalo	6,000	400	.....
1863	Steamer Cleveland, supplies, stranded at Eagle Harbor and sunk	v 3,500	2,000	.....
	Same steamer lost her captain (John Ratteray), Waiska Bay	.....	.....	1
	Steamer Planet, struck a rock off Keweenaw Point	1,600	.....	.....
	Steamer Sunbeam, supplies, foundered in a heavy gale with all on board	v 30,000	4,500	32
	Schooner George Goble, railroad iron, damaged and threw over cargo in a gale	400	300	.....
	Propeller Dubuque, supplies, damaged by ice, got into Portage Lake, and sunk	500	5,000	.....
1864	Propeller Iron City, struck a reef and sunk in Waiska Bay	4,000	1,000	.....
	Schooner General Scott, ore, sprung a leak in a gale, reached Sault and sunk	1 600	600	.....
	Steamer Illinois, struck a reef and sunk at Eagle River	v 6,000	3,000	.....
	Propeller Lac La Belle, ashore in a storm above Eagle River	v 5,000	400	.....
	Steamer Cleveland, damaged in a gale near Marquette	500	.....	.....
	Propeller City of Madison, disabled off Portage in a gale	v 600	.....	.....
	Schooner Pierpont, ore, ashore in a gale near Eagle River	v 2,000	300	.....
	Schooner M. Ballard, disabled in a storm above Portage	v 400	.....	.....
	Schooner Queen City, ore, wrecked near Marquette	8,000	2,000	.....
	Schooner Wild Rover, disabled near same locality	300	.....	.....
	Schooner George Foote, ore, wrecked in a gale near Marquette	10,000	4,000	.....
	Schooner Starlight, disabled in a storm, same locality	500	.....	.....
	Steamer Cleveland, supplies, wrecked at Two Heart River, total loss	30,000	5,000	.....
1865	Propeller Union, disabled and towed to Copper Harbor	v? 2,000	.....	.....
	Propeller Lady Franklin, disabled and towed to Detroit	1,500	.....	.....
	Steamer Traveller, burned at Eagle Harbor	40,000	8,000	.....
	Propeller Lady Franklin, collided and sunk in Waiska Bay	8,000	5,000	.....
	Schooner Pierpont, ore, ashore in a gale at Mineral Point	4,000	500	.....
1866	Propeller Lady Franklin, disabled in a storm, got into Egg Harbor	v 1,000	.....	.....
	Bark D. Morris, coal, ashore and threw over 100 tons	800	500	.....
	Schooner Harriet Ross, in a gale, sunk while making Eagle Harbor	v 500	800	.....
	Schooner Saginaw, in a gale runs for Eagle Harbor and sunk	v 900	300	.....
	Steamer Keweenaw, stranded on a reef above Carp Lake	1,000	.....	.....
	Bark Tubal Cain, supplies, lost cargo and damaged	500	400	.....
	Steamer John A. Dix, stranded on a reef near White Fish Point	400	.....	.....
1867	Propeller Meteor, disabled in a storm while *en route*	500	.....	.....
	Bark Fontanelle, ore, in a gale ran into Eagle Harbor and sunk	v 600	.....	.....
1867	Bark Favorite, ore, in a gale ran into Marquette and stranded	800	200	.....
	Tug J. C. Morse, stranded and sunk at Partridge Island	500	.....	.....
	Propeller Concord, disabled in gale off Portage	v 600	.....	.....
	Tug Cyclone, took fire and run into Marquette	450	.....	.....
	Propeller S. D. Caldwell, disabled in a storm off Ontonagon	v? 1,000	.....	.....
1868	Schooner Oneida Chief, pig-iron, stranded at Point Sauble	400	200	.....
	Propeller Meteor, disabled and towed to Detroit	1,500	.....	.....
	Bark De Soto, disabled and towed into Marquette	500	.....	.....
	Schooner Reindeer, a like casualty, same results	400	.....	.....
	Schooner Idaho, a like casualty, same results	500	.....	.....
	Steamer Warrington, disabled in a gale off White Fish Point	1,000	.....	.....
1869	Propeller Cuyahoga, ran into Eagle Harbor in a gale and sunk	v 3,000	.....	.....
	Propeller Queen of the Lakes, pig-iron, burned at Marquette	40,000	.....	.....
	Propeller Saint Paul, disabled near Marquette	2,000	.....	.....
	Schooner North Star, capsized in a gale	3,000	.....	2
	Propeller Atlantic, stranded near Superior City	1,000	.....	.....
	Schooner St. Andrew, collided off Marquette	400	.....	.....
	Schooner E. R. Blake, ashore in a gale at White Fish Point	800	.....	.....
	Schooner Montauk, disabled near same place	400	.....	.....
	Propeller Edith, disabled near Marquette	800	.....	.....
	Bark Nucleus, disabled near Marquette	700	.....	.....
	Schooner Grace Murray, stranded near Portage	v 500	.....	.....
	Propeller Pacific, collided near Marquette	600	.....	.....
	Schooner C. J. Magill, damaged by heavy weather off Marquette	300	.....	.....
	Schooner M. Stalker, a like casualty, same locality	400	.....	.....
	Schooner E. Bates, collided near Marquette	300	.....	.....
	Schooner Pierpont, ore, sprung a leak above Marquette	200	.....	.....
	Propeller Meteor, disabled in a storm off Portage	v 500	.....	.....
	Propeller Adriatic, a like casualty off Portage	v 300	.....	.....
	Schooner E. Bates, supplies, ashore in a gale at Grand Island	800	1,000	.....
	Schooner W. W. Arnold, ore, foundered with all on board in mid-lake	10,000	5,000	10
	Schooner Bermuda, supplies, ashore in a gale	15,000	10,000	3
	Bark De Soto, collided near Marquette with schooner Athenian	400	.....	.....
	Schooner Athenian, sustained damages by said collision	300	.....	.....
	Schooner Clara Parker, damaged by collision near Portage	500	.....	.....
1870	Schooner E. Bates, ashore with ore at Grand Island	1,500	300	.....
	Schooner Southwest, ore, ashore at Vermillion Point	1,000	2,800	.....

Shipwrecks and loss of life on south shore of Lake Superior—Continued.

Year.	Name of vessel, cargo, &c.		Hull.	Cargo.	
1870	Bark Louisa, lost cargo and man overboard near Portage	v	$400	$200	1
	Schooner Africa, ore, stranded at Round Island		3,000	1,000	.....
	Schooner George W. Holt, ashore at Grand Island		800	.....	.....
	Bark Lottie Wolf, disabled in a gale above White Fish		400	.....	.....
	Schooner Jos. Cochran, damaged by storm while *en route*		800		.....
	Schooner A. H. Moss, ore, ashore near Eagle Harbor	v	4,000	2,500	.....
	Schooner Dreadnought, ore, ashore at Grand Island		8,000	5,000	
	Schooner S. B. Pomeroy, ore, damaged in a gale		400	.....	2
1871	Schooner H. C. Winslow, ore, sprung a leak in a gale and sunk at Marquette		1,000	300	.....
	Tug Torch, sprung a leak and sunk, same locality		800	.....	.....
	Schooner Portage, disabled in a gale off Portage	v	400	.....	.....
	Schooner Plover, wheat, sprung a leak and sunk in a gale; total loss.	?	10,000	18,000	.....
	Schooner Stranger, sunk in a gale and damaged by ice		5,000	.....	.....
	Schooner Wilcox, disabled by heavy weather		500	.....	.....
	Tug Grant, lost steam pump overboard in gale		.....	2,500	.....
	Schooner Empire State, disabled by heavy weather		500	.....	.....
	Bark Alice Richards, dismasted in a gale		600	.....	.....
	Propeller Cleveland, broke her shaft in a gale and towed to Detroit.		1,500	.....	.....
	Schooner Alice Craig, dismasted in a storm		200	.....	.....
	Schooner You Tell dismasted in a gale		300	.....	.....
1872	Propeller Union, supplies, ashore at White Fish Point		1,000	500	.....
	Schooner Cascade, ashore at White Fish Point		400	.....	.....
	Tug Danforth, burned at Duluth		4,000	.....	.....
	Tug Tempest, lost a scow loaded with machinery in a gale		2,000	2,500	.....
	Schooner Middlesex, ore, sprung a leak off Marquette		1,000	400	.....
	Schooner E. C. Roberts, damaged by heavy weather *en route*		800	.....	.....
	Schooner A. H. Moss, damaged by heavy weather *en route*		400	.....	.....
	Schooner Algerine, ore, sprung a leak in a gale off Eagle Harbor	v	900	300	.....
	Schooner Maple Leaf, supplies, ashore at Minnesota Point; total loss.		10,000	8,000	.....
	Propeller Cuyhoga, run for Eagle Harbor and stranded	v	3,000	.....	.....
	Propeller St. Paul, disabled in a gale off White Fish Point		1,500	.....	.....
	Propeller tug Williams, disabled and run into Portage	v	800	.....	.....
	Schooner F. Palms, ashore below Duluth in a gale		1,000	.....	.....
	Schooner Sweetheart, ashore same time and locality		500	.....	.....
	Propeller St. Paul, stranded near Duluth		600	.....	.....
	Propeller India, disabled off Eagle Harbor	v	1,000	.....	.....
	Schooner Marquette, ore, ashore on Grand Island		900	800	.....
	Barge Jupiter, ore, foundered with all hands, near White Fish Bay.		8,000	4,000	7
	Barge Saturn, ore, foundered with all hands, near White Fish Bay..		9,000	4,000	8
	Schooner W. O. Brown, wheat, foundered in a gale, same locality..		10,000	14,000	8
	Schooner C. C. Griswold, grain, foundered with all hands, same storm		12,000	15,000	8
1873	Bark Massilon, ore, ashore at White Fish Point		1,200	500	.....
	Schooner Harvest Home, disabled by heavy weather		800	.....	.....
	Rrig Mechanic, ore, sunk near Marquette in a gale		2,000	800	.....
	Schooner Cambridge, ore ashore and total loss near Marquette		25,000	8,000	.....
	Bark Acorn, ore, sprung a leak in a gale		4,000	800	.....
	Propeller Union, supplies, ashore at Point Sauble		22,000	8,000	.....
	Steam barge Geneva, ore, sprung a leak and sunk off White Fish Point; total loss		75,000	20,000	.....
	Schooner Mary Elizabeth, ore, lost deck load in a gale		200	400	.....
1874	Propeller Cuyahoga, sprung a leak off Portage	v	500	.....	.....
	Schooner Charger, ashore in a gale while *en route*		600	.....	.....
	Schooner Sweetheart, grain, damaged cargo in a storm		300	800	.....
	Steam barge Jarvis Lord, disabled off White Fish Point		1,000	.....	.....
	Propeller Ontario, damaged in a gale *en route* eastward		500	.....	.....
	Schooner Harvest Home, ore, stranded in Waiska Bay		1,000	500	.....
	Propeller Rocket, ashore at same point		500	.....	.....
	Schooner D. R. Owen, light, ashore at Minnesota Point		800	.....	.....
	Propeller City of Duluth, disabled off Portage	v	1,000	.....	.....
	Steamer Lottie Bernard, foundered off Eagle Harbor	v	8,000	.....	3
	Schooner T. Morell, ore, stranded at Grand Island; total loss		15,000	8,000	.....
1875	Propeller Pacific, ashore at Point Iroquois		2,000	.....	.....
	Propeller Winslow, disabled in a gale		6,000	.....	.....
	Propeller Cornet, silver ore and pig-iron, sunk by steamer Manitoba		45,000	50,000	10
	Steamer Manitoba, damages		1,000	.....	.....
	Schooner J. F. Card, ore, disabled in heavy weather		3,000	500	.....
	Bark Chenango, ore, ashore in a gale at Grand Island		12,000	4,000	.....
	Barge Sumatra, ore, ashore at Two Heart River		2,000	600	.....
1876	Propeller Nashua, disabled in a gale		600	.....	.....
	Propeller Sovereign, damaged by heavy weather		800	.....	.....
	Schooner Bohemia, damaged by heavy weather		300	.....	.....
	Schooner Constitution, coal, ashore at White Fish Point		4,000	1,000	.....
	Propeller Nahant, ashore at Waiska Bay		1,000	.....	.....
	Tug Chasset, burned at Portage Entry		4,000	.....	.....
	Schooner H. Taylor, supplies, ashore at Eagle Harbor	v	8,000	6,000	.....
	Propeller Ira Chaffee, supplies, ashore in a storm		18,000	12,000	.....
1877	Propeller Pacific, ashore near Traverse Island	v	10,000	.....	.....
	Steamer Keweenaw, disabled in a gale		5,000	.....	.....
	Propeller City of New York, collided off Portage		3,500	.....	.....

Shipwrecks and loss of life on south shore of Lake Superior—Continued.

Year.	Name of vessel, cargo, &c.	Hull.	Cargo.	Life.
1877	Schooner Chas. Hinckley, damaged by heavy weather off Copper Harbor	v $1,000	.....	.....
	Schooner American, damaged by collision off Portage	2,300	.....	.....
	Schooner W. B. Ogden, ore, ashore at White Fish Point	4,000	$1,000	.....
	Steamer Ivanhoe, burned at Houghton	16,000	.....	.....
	Propeller Lowell, stranded near Portage River	v 600	.....	.....
	Propeller City of Fremont, threw over 300 barrels flour in a gale	v 500	1,500	.....
1878	Tug Ontario, damaged by fire off Marquette	1,000	.....	.....
	Schooner George Sherman, sprung a leak in a gale off Portage	v 500	.....	.....
	Barge Trempe, ore, ashore at White Fish Point	800	400	.....
	Barge Ste. Marie, ore, ashore same time and place	300	200	.....
	Schooner D. Wagstaff, damaged by heavy weather	1,000	.....	.....
	Propeller City of Fremont, struck a reef near White Fish	300	800	.....
	Tug E. M. Peck, damaged in a gale at White Fish Point	700	.....	.....
1879	Tug Satellite, sprung a leak and sunk	16,000	.....	.....
	Tug Antelope, sprung a leak and sunk on a reef	6,000	.....	.....
	Propeller Manistee, disabled in a gale above Portage	v 1,000	.....	.....
	Propeller City of Duluth, disabled in same locality	v 5,000	.....	.....
	Schooner Morning Star, damaged by heavy weather off Marquette	500	.....	.....
	Schooner Monticello, ore, ashore above Portage in a gale	v 2,000	1,000	.....
	Schooner Reindeer, ore, ashore same time and place	v 600	300	.....
	Propeller Arizona, damaged by heavy weather off Marquette	900	.....	.....
	Schooner Laura Bell, disabled by a gale off Copper Harbor	v 600	.....	.....
	Schooner Franz Sigel, disabled by a gale off Eagle Harbor	v 500	.....	.....
1880	Propeller City of Winnipeg, disabled below Duluth	500	.....	.....
	Propeller Peerless, disabled near Portage	v 600	.....	.....
	Schooner Plowboy, powder, sprung a leak and sunk	13,000	3,000	.....
	Tug W. B. Castle, sprung a leak and disabled at White Fish Point	1,000	.....	.....
	Schooner Southwest, struck by lightning off Marquette	300	.....	.....
	Schooner Starlight, capsized by squall off Portage	v? 4,000	.....	5
	Schooner A. M. Peterson, ore, ashore above White Fish Point	5,000	1,000	.....
	Schooner Davidson, damaged by heavy weather	500	.....	.....
	Schooner I. N. Foster, a like casualty below Duluth	800	.....	.....
	Schooner J. B. Wilbor, damaged by same storm	600	.....	.....
	Schooner Anna Maria, ore, stranded near Portage	v 6,000	1,000	.....
	Propeller India, damaged in gale off Copper Harbor	v 500	.....	.....
1881	Propeller Asia, collided near Duluth	4,000	.....	.....
	Steam barge Middlesex, burned at L'Anse	65,000	.....	.....
	Propeller City of Winnipeg, burned near Duluth	35,000	9,000	4
	Schooner Negaunee, disabled by squall off White Fish Point	400	.....	.....
	Schooner Thomas Queyle, damaged in a like manner off White Fish Point	500	.....	.....
1882	Schooner Southwest, ore, sprung a leak and sunk at Grand Island	3,000	500	.....
	Schooner Gen. Sigel, ashore at Point Sauble	1,000	.....	.....
	Schooner Eclipse, ashore near same place	800	.....	.....
	Steamer Grace, ashore at White Fish Point	3,000	.....	2
	Propeller Ontario, threw overboard 400 barrels flour off White Fish Point	500	1,600	.....
	Barge G. D. Russell, sprung a leak, arrived at Sault and sunk, ore	20,000	1,300	.....
	Steam barge Huron City, coal, stranded at Eagle Harbor	v 2,000	500	.....
	Barge McGilveray, coal, stranded and sunk and collided, Portage Lake	v 3,000	800	.....
	Steam barge V. Swain, ore, damaged in gale off Marquette	1,500	.....	.....
	Propeller Peerless, disabled off Eagle River	v 500	.....	.....
	Steam barge Tuttle, stranded near Light-House Point	200	.....	.....
	Schooner George H. Ely, damaged same time and place	2,000	.....	.....
	Scow Pearl, wrecked on White Fish Point	3,000	.....	.....
1883	Steam barge Mary Jarecki, coal, wrecked at Point Sauble; total loss	32,000	8,000	.....
	Propeller J. R. Whiting, lumber, disabled at White Fish Point	1,200	.....	.....
	Schooner Dot, ore, wrecked at Grand Marais	10,000	5,000	.....
	Schooner King Sisters, ore, ashore near Marquette	700	400	.....
	Schooner Sumatra, ore, ashore same place	7,500	8,000	.....
	Schooner Laura Bell, coal, ashore same place	17,000	400	1
	Schooner George Sherman, ore, ashore at Grand Island	2,000	300	.....
	Schooner Cecilia, wood, lost cargo and damaged in a gale	7,000	600	.....
	Schooner Wabash, coal, ashore at Pictured Rocks	15,000	600	.....
	Propeller Manistee, foundered in a gale and all lost	v 40,000	20,000	23
1884	Propeller City of Duluth, stranded at Copper Harbor	v 8,000	.....	.....
	Schooner E. A. Mayes, coal, wrecked on Grand Island	7,000	2,000	.....
	Steamer Ozaukie, wrecked at Ashland	4,000	.....	.....
	Barge Mears, stranded on White Fish Point	800	.....	.....
	Schooner Three Brothers, stone, ashore at Porcupine's	v? 6,000	2,500	.....
	Steam barge Cormorant, disabled at Round Island	750	.....	.....
	Propeller Pacific, stranded at White Fish Point	1,000	.....	.....
	Steam barge Sparta, stranded at Point Iroquois	740	.....	.....
	Propeller J. M. Osborn, ore, collided and sunk at White Fish Point	50,000	35,000	.....
	Propeller Alberta, same collision, damaged	12,200	.....	.....
	Steam barge S. C. Baldwin, stranded at Ashland	800	.....	.....
	Tug Pacific, exploded near Ashland	3,000	.....	3
	Schooner J. Bigler, stone, sunk in a gale off Portage	10,000	3,500	.....
	Schooner W. R. Taylor, ore, ashore at Huron Bay	1,000	300	.....

Shipwrecks and loss of life on south shore of Lake Superior—Continued.

Year.	Name of vessel, cargo, &c.	Hull.	Cargo.	Life.
1884	Schooner Golden Rule, sunk in a gale	$10,000	.....	.....
	Schooner Negaunee, ore, stranded in Waiska Bay	1,500	.....	.....
	Schooner White Star, ore, stranded in Waiska Bay	2,500	$1,600	.....
	Tug Winslow, stranded in Waiska Bay	2,500	.....	.....
	Schooner John Martin, ashore at White Fish Point	1,000	.....	.....
	Propeller Scotia, wrecked at Keweenaw Point; total loss	v 80,000	.....	.....
	Propeller Wocoken, wheat, sprung a leak in a gale	1,000	2,200	.....
	Schooner R. Winslow, wheat, sprung a leak in a gale	1,400	3,000	.....
	Schooner H. Bissell, ashore at Eagle River	v 20,000	.....	.....
	Schooner M. Battle, ashore at Eagle River	v 10,000	.....	.....
	Propeller Morley, wheat, wrecked at Grand Marais	50,000	26,000	.....
	Propeller Wocoken, disabled in a gale	800	.....	.....
1885	Tug Cora Sheldon, burned at Ontonagon	6,000	.....	.....
	Propeller Egyptian, ore, stranded at Eagle Harbor	v 1,000	900	.....
	Tug Carrington, burned at Portage	6,000	.....	.....
	Schooner S. V. Watson, ore, ashore on Huron Reef	1,500	2,000	.....
	Propeller Wallula, flour, damaged in a gale	v? 900	6,000	.....
	Schooner Sandusky, coal, ashore at White Fish Point	3,000	400	.....
	Propeller City of Rome, damaged by fire at Duluth	2,000	.....	.....
	Schooner Favorite, ore, sunk at Bayfield	4,000	1,500	.....
	Propeller Staracca, flour damaged in a gale	v? 2,000	.....	.....
	Schooner H. M. Scove, stone, collided and sunk	2,200	800	.....
	Propeller Tacoma, coal, disabled in a gale	2,500	.....	.....
	Propeller R. M. Forbes, coal, ashore at Apostle Island	15,000	1,800	.....
	Schooner F. W. Wheeler, ore, foundered in a gale	35,000	5,000	.....
	Schooner G. Pfister, ore, stranded at Marquette; total loss	25,000	3,000	.....
	Total	**1,804,640**	**554,700**	**200**

GRAND TOTAL.

Losses on hull	$1,804,640
Losses on cargo	554,700
Total	2,359,340
Total loss of life	200

I hereby certify that the foregoing is a correct statement as taken from the records for the years therein recorded.

JOHN W. HALL,
Marine Reporter.

DETROIT, *November* 8, 1886.

APPENDIX B.

COMMUNICATIONS RESPECTING THE ROUTE.

LAKE SUPERIOR TRANSIT COMPANY,
Detroit, Mich., October 8, 1886.

DEAR SIR: In view of the approaching meeting of the Board of Army Engineers to examine and report upon the Portage Lake canals "in all their relations to commerce" and navigation, and the propriety of their acquisition by the General Government for purpose of making them free passage-ways as provided for in the river and harbor bill as approved August 5, 1886 (see copy of the clause herewith), we assume the liberty of handing you (as the same may be convenient as a matter of reference) a full memorandum list of all petitions, &c., presented in the United States Senate and House of Representatives from January 20 to March 1, 1885, inclusive, and being within the limits of the second session of the Forty-eighth Congress, asking that the purchase of said canals might be provided for. Also find herewith two copies each of printed matter under dates of April 16, 1884, and February, 1885, that have been used at and about Washington that may also be convenient for you to have for reference or presentation to the Board of Engineers; and if they are found suitable for presentation to the Board we would suggest that it be done by official indorsement of your Board.

In connection with this subject we would further say that we gather from the action had by a similar Board of Engineers in their late meeting at Rock Island, Ill., to investigate the merits of the Hennepin Canal project, as shown in fourth column

on third page of Chicago Times of Octobe 1, 1886, and other reliable sources, that it is highly probable that the coming Board will require all the statistical information that it is possible to obtain as to the volume of business east and west bound passing through or tributary to said canals, with statement showing what it has or is costing the people of Houghton County and the country at large for their use under their present ownership, with whatever may be considered a fair statement as to probable increase of their use for both local and through business when made free, which, as we see it, must be very large for the latter, as it will serve to shorten the route and avoid the delays and dangers attending the routes via Point Keweenaw. We also feel assured, from what we hear of the Hennepin meeting, that it will be important to demonstrate as far as possible to the Board of Engineers that the Portage canals are of a national and not local character, and think from the nature of the traffic now passing through them there will not be much difficulty in doing that, and in which we fancy Hon. Jay A. Hubbell, if at home, can doubtless render valuable aid, as we understood that he made a very strong argument on that identical proposition before the Senate Committee on Commerce when at Washington last winter.

We deem the question as to the national charactor of the canals a very significant and important one, as it is questionable if the Board would recommend their purchase for the exclusive benefit of Houghton County or the State of Michigan.

We would also suggest that it will be both proper and well to direct the attention of the Engineers to the rapidly increasing east and west bound through business of Lake Superior, which, in the absence of other data, is partly demonstrated by the reported shipments of iron ore, as shown in a somewhat mutilated cutting from the Marquette Mining Journal of September 25, 1886, herewith inclosed, some of which ore, say that from Ashland if not Two Harbors, would have sought the short route across Point Keweenaw had the canals been public water-ways, free of tolls.

It is also desirable in the arguments to be made before the Board of Engineers that the importance of the canals as free harbors of refuge shall be strongly urged upon their attention as a necessity to the safety of life and property. The fact that there is now no free harbor of refuge between Copper Harbor and Bayfield, a distance of some 160 miles, is one of the strong points to be made on that proposition.

Our long connection with the Lake Superior shipping interests must be our apology, if one is needed, for writing at such length on this subject.

Yours respectfully,

J. T. WHITING.

JOHN DUNCAN, Esq.,
Chairman Board of Supervisors, Houghton County, Calumet, L. S., Michigan.

Memorandum of petitions, &c., presented in the United States House of Representatives, asking that Congress shall provide for the purchase of the Portage Lake canals across Point Keweenaw, Lake Superior, Michigan, as reported in the Congressional Record from January 20 to and including February 26, 1885.

Date.	Number of petitions.	By whom presented.	Whence received.
Jan. 20	1	Mr. B. W. Jones	Milwaukee Chamber of Commerce.
20	1	Mr. Nelson	Duluth Board of Trade.
20	1	do	Minneapolis Chamber of Commerce.
21	1	Mr. Deuster	Milwaukee Chamber of Commerce.
22	3	Mr. Mabury	Detroit.
22	5	Mr. Breitung	Houghton County.
22	1	do	Chicago Board of Trade.
23	1	Mr. G. R. Davis	Do.
24	1	Mr. Nelson	Citizens of Duluth.
27	1	Mr. Lyman	Massachusetts and New York (mining companies).
30	1	Mr. Hatch	Bay City.
31	1	Mr. Lacey	Detroit Board of Trade.
31	1	Mr. Strait	Legislature of Minnesota.
31	1	Mr. Cutcheon	Detroit Board of Trade.
31	2	Mr. Foran	Cleveland, Ohio.
Feb. 1	1	Mr. Rogers	Merchants' Exchange, Buffalo.
1	1	Mr. Wait	Waterbury, Conn.
3	1	Mr. Breitung	Legislature of Michigan.
3	2	do	Citizens of Marquette, Mich.
3	1	Mr. Stephenson	Citizens of Ashland, Wis.
5	2	Mr. Carleton	Citizens of Saint Clair County, Michigan.

Memorandum of petitions, &c.—Continued.

Date.	Number of petitions.	By whom presented.	Whence received.
Feb. 5	1	Mr. Winans	Legislature of Michigan.
7	1	Mr. Nelson	Legislature of Minnesota.
7	1	Mr. Jones	Legislature of Wisconsin.
8	1	Mr. Stephenson	Do.
11	1	Mr. S. S. Cox	New York (Ja. Stanton, &c.)
12	1	Mr. Storm	Commercial Exchange, Philadelphia.
12	1	Mr. Harmer	Resolution, Exchange, Philadelphia.
12	1	....do	Memorial, Exchange, Philadelphia.
12	1	Mr. Bingham	Do
12	1	Mr. Skinner	Alexandria Bay, N. Y.
12	1	Mr. Hopkins	Commercial Exchange, Philadelphia.
13	1	Mr. Guenther	Legislature of Wisconsin.
13	1	Mr. Ermentrout	Commercial Exchange, Philadelphia.
14	1	Mr. C. R. Skinner	Clayton, N. Y.
24	1	Mr. G. R. Davis	Legislature of Illinois.
24	1	Mr. Dunham	Do.
24	1	Mr. Riggs	Do.
25	1	Mr. Milo White	Legislature of Minnesota.
25	1	Mr. Storm	Erie Board of Trade (resolutions).
26	1	Mr. Parker	New York Produce Exchange, New York.
26	1	Mr. Skinner	Do.

Memorandum of petitions, &c., presented in the United States Senate asking that Congress shall provide for the purchase of the Portage Lake canals across Point Keweenaw, Lake Superior, Michigan, as reported in the Congressional Record from January 21 to and including March 1, 1885.

Date.	Number of petitions.	By whom presented.	Whence received.
Jan. 21	1	Mr. Sawyer	Milwaukee Chamber of Commerce.
22	4	Mr. Conger	Houghton and Hancock.
22	3	...do	Detroit.
23	1	Mr. McMillan	Saint Paul Chamber of Commerce.
24	3	Mr. Palmer	Houghton County.
24	1	Mr. McMillan	Minneapolis Chamber of Commerce.
27	1	Mr. Hoar	Massachusetts and New York mining companies.
28	1	Mr. Palmer	Detroit.
30	1	Mr. McMillan	State legislature, Minnesota.
31	1	Mr. Conger	Detroit Board of Trade.
31	1	Mr. Cullom	Chicago Board of Trade.
31	1	.....do	Citizens of Chicago.
Feb. 3	1	Mr. Sherman	Citizens of Toledo.
3	1	Mr. Conger	Legislature of Michigan.
3	2	Mr. Sherman	Citizens of Cleveland.
4	4	Mr. Palmer	Citizens of Detroit.
5	1	Mr. Mitchell	Citizens of Pennsylvania.
6	1	Mr. Sabin	Legislature of Minnesota.
6	1	Mr. Conger	Port Huron, Mich.
7	1	Mr. Miller.	Buffalo (Smith & Davis).
8	1	Mr. Cameron	Legislature of Wisconsin.
11	1	Mr. Miller	Buffalo (J. Staunton, &c.).
14	1	Mr. Mitchell	Commercial Exchange, Philadelphia.
17	1	Mr. Palmer	Legislature of Michigan.
17	1	.....do	Detroit Board of Trade.
20	1	Mr. Mitchell	Board of Trade of Erie, Pa.
21	1	Mr. Cullom	Legislature of Illinois.
26	1	Mr. Conger	Board of Trade of Toledo.
27	1	Mr. Sherman	Do.
Mar. 1	1	Mr. Mitchell	Philadelphia underwriters, Philadelphia.

HANNA & CO.,
Cleveland, Ohio, October 8, 1886.

GENTLEMEN: I deem it proper to present to you, before your report is made, some facts resulting from an experience in navigating Lake Superior during the past twenty-eight years. At the present time a large majority of the tonnage coming from and going to Lake Superior, is shipped and received at points west of Keweenaw Point. The greatest danger to navigation and the greatest delays from storms lies at Keweenaw Point. It is a fact well known to navigators that more loss has occurred on Keweenaw Point than on all the rest of Lake Superior combined. The necessity, therefore, of having a safer and shorter passage through Point Keweenaw with draught of water for the largest class of vessels is obvious.

The present canals do not admit the passage of vessels of the largest class, nor do they admit at their entrance vessels drawing 10 feet or more water, that are seeking harbors of refuge during storms.

These facts will be evident upon your examination, and I want to urge in connection with them that this great water-way is not of local but *National* importance.

Both the eastern and western entrance should be enlarged and deepened that vessels may enter during storms, making them, in fact, harbors of refuge, as well as the means of saving expensive delays. It would be of frequent occurrence that vessels entering at either passage could proceed from the other, without detention, that might otherwise be weather bound for several days in the rocky and unsafe harbors on the west side of Keweenaw Point or anchored in an exposed position in Keweenaw Bay.

Representing and owning a very large shipping interest I feel that the vast and growing commerce of Lake Superior demands, and should receive, greater facilities and greater protection from the National Government.

Very respectfully,

H. M. HANNA.

The BOARD OF ENGINEERS APPOINTED TO EXAMINE
AND REPORT UPON THE PORTAGE LAKE CANALS, &C.

CHAMBER OF COMMERCE,
Duluth, Minn., October 9, 1886.

GENTLEMEN: Learning that your Board is to have a meeting on the 16th of October to investigate the question of the United States taking the Portage Lake Ship Canal, the "Chamber of Commerce of Duluth" desire to present to you their opinion in reference to that matter.

The route now taken by vessels between Duluth and the lower lakes passes around Keweenaw Point, a stormy and dangerous coast. If the canal through Keweenaw Point was the property of the General Government, and deepened so as to allow the passage of our fully laden and large freight boats, the distance between Duluth and the Sault Ste. Marie would be sensibly shortened, and that stretch of dangerous navigation be avoided, and thus the charges or cost of transportation of the products of Minnesota, Dakota, Nebraska, Montana, and Washington Territory to the Atlantic seaport would be considerably reduced.

We therefore claim that there is a deep interest on the part of the shipping interests and the business community of this city, and the country tributary to it on the west, in having this work adopted by the General Government and put in proper shape for the passage of large vessels.

We make this statement that your commission may understand that this work is looked upon with interest by the people of our country, and that it is more than a local question of the people residing upon Keweenaw Point.

Very respectfully,

O. H. SIMONDS,
President.
EDGAR R. MILLS,
Secretary.

The BOARD OF THE UNITED STATES ENGINEERS
OF THE PORTAGE LAKE SHIP-CANAL.

THE ERIE AND WESTERN TRANSPORTATION COMPANY,
Philadelphia, October 11, 1886.

GENTLEMEN: We are informed that your honorable Board is about to convene at Calumet to commence the examination into the relations of the Partage canals to the commerce of the country, that was contemplated by the river and harbor bill approved August 5, 1886.

This company operates a large fleet of lake vessels together with the lake terminal properties needed in connection therewith, and is engaged in the transportation of domestic and foreign bound trade. We are very deeply interested in every effort to lessen the hazards and increase the economy of lake transportation, as it is by such means that it is made possible to secure and maintain an improved and economical public carrying service.

We consider that the acquisition by the United States of the water-ways across Keweenaw Point, by way of the Portage River and Lake will very materially lessen the hazards, and consequently make it possible to increase the economy of lake-carrying service. The work is properly a national one. While the water-ways are located within the State of Michigan, they are and will be used by an extensive traffic, originating in the States and Territories west and south of Lake Superior to and including the Pacific coast, and destined for distribution through all the States east, north, and south of Lake Erie, including the seaboard cities by way of which we export to foreign countries. The important service that the water routes perform in regulating the carrying rates by all transportation lines and routes is now generally recognized and highly valued.

We take the liberty of inclosing for your information and file copies of papers setting forth the action taken by the Board of Trade of the city of Erie, the Commercial Exchange of Philadelphia, and the New York Produce Exchange, when the question of the propriety of the United States purchasing the Portage water-ways was before these bodies for consideration.

We will be pleased to respond to any inquiries your honorable Board may desire to address to us in this connection, and sincerely trust that you may be as strongly impressed as we are with the propriety and necessity for the United States extending the contemplated aid to the shipping and carrying public.

Respectfully yours,

FRANK J. FIRTH,
President.

The BOARD OF UNITED STATES ENGINEERS
ENGAGED IN THE EXAMINATION OF THE PORTAGE CANALS.

NEW YORK PRODUCE EXCHANGE,
New York, February 25, 1885.

At a meeting of the Board of Managers of the New York Produce Exchange, held this day, the following resolutions were adopted:

Resolved, That the Board of Managers of the New York Produce Exchange recommends the purchase by the United States Government of the Portage Lake and Lake Superior Ship Canal, on the terms and conditions set forth in the report of Colonel Poe, of the War Department, in response to a resolution adopted by the Senate April 22, 1884.

Resolved, That a copy of the above resolution be transmitted to our Senators and Represenatives from this State in Washington.

E. C. RICE,
Secretary pro tem.

THE COMMERCIAL EXCHANGE OF PHILADELPHIA.

Preamble and resolutions regarding the purchase by the United States of the Portage Lake and Lake Superior Ship Canal.

Whereas, in answer to a resolution passed by the Senate of the United States, April 22, 1884, calling for a detailed report concerning the Portage Lake and Lake Superior Ship Canal, and the interests of the State of Michigan therein, also as to the rights, titles, &c., of the Portage Lake and River Improvement Company, with a view to securing the canals and improvements for the purpose of making a free water-way for the use and benefit of navigation and commerce, the Hon. Secretary of War transmitted on or about January 5, 1885, the report of the Chief of Engineers, embodying the detailed report of Col. O. M. Poe, of the Engineer Corps, to whom was assigned the duty of making the investigation called for by the said resolution, and who reports in favor of, and recommends that Congress takes steps to purchase said improvements and make them free water-ways to the commerce of the lakes; therefore, be it

Resolved, That the Board of Directors of the Commercial Exchange of the city of Philadelphia do hereby request our Senators and Members of Congress to use their best endeavors to secure such legislation as shall result in the speedy acquisition by

the United States of the title to, and ownership of, said canals and water-ways; provided the price to be paid therefor shall be deemed equitable by a competent commission appointed for that purpose.

Resolved, That copies of these resolutions be sent by the Secretary to each of our Senators and Representatives in Congress.

BOARD O TRADE OF THE CITY OF ERIE.

At a special meeting held on the evening of the 14th day of February, 1885, the following preamble and resolutions were adopted:

"Whereas the Lake Superior Ship Canal Company and the Portage Lake and River Improvement Company's canals and water-ways connecting Keweenaw Bay with the waters of Lake Superior, in the upper peninsula of Michigan, are necessary for the safe and rapid transit of the waters of Lake Superior by our lake marine; and

"Whereas the said canals and water-ways do away with the necessity of vessels passing around the dangerous peninsula of Keweenaw, where so many vessels have been wrecked, and save a distance of 125 miles sailing east and west on the waters of Lake Superior; and

"Whereas said canals and water-ways are in the hands of private corporations, who collect tolls that are a serious tax upon the trade and commerce of the Great Lakes, and a hindrance to the growing trade upon our water highways, the natural outlet for the product of the upper peninsular of Michigan and the Northwest; and

"Whereas in answer to a resolution passed by the Senate of the United States April 22, 1884, calling for a detailed report concerning the Portage Lake and Lake Superior Ship Canal, and the interests of the State of Michigan therein, also as to the rights, titles, &c., of the Portage Lake and River Improvement Company, with a view to securing the canals and improvement for the purpose of making a free waterway for the use and benefit of navigation and commerce, the Honorable Secretary of War transmitted, on or about January 5, 1885, the report of the Chief of Engineers, embodying the detailed report of Col. O. M. Poe, of the Engineer Corps, to whom was assigned the duty of making the investigation called for by the said resolution, and who reports in favor of, and recommends that Congress take steps to purchase said improvements, and make them free water-ways to the commerce of the lakes; therefore, be it

"*Resolved*, That we, the Board of Trade of the city of Erie, Pa., do hereby request our Senators and Members of Congress to use their best endeavors to secure such legislation as shall result in the speedy acquisition by the United States of the title to, and ownership of, said canals and water-ways.

"*Resolved*, That copies of these resolutions be sent by the Secretary to each of our Senators and Representatives in Congress."

"Respectfully submitted.

"MATTHEW GRISWOLD,
"*President Board of Trade of the City of Erie.*

"Attest:

"DOUGLAS BENSON,
"*Secretary.*"

VESSEL-OWNERS' ASSOCIATION,
Cleveland, Ohio, October 12, 1886.

Whereas the opening of extensive iron mines about the upper end of Lake Superior, and the rapid settlement of the great Northwest, and its development by railroads leading to the western end of Lake Superior, have in recent years vastly increased the lake commerce between the upper end of Lake Superior and the East, as shown in the immense shipments of iron ore and grain from that section, and the increased demand for coal at these Lake Superior ports, which increase will undoubtedly be continuous; and

Whereas the building of the great number of vessels of the largest class, which are now under contract for construction during the coming winter, is, for the most part, to care for this increased traffic with the upper end of Lake Superior; and

Whereas about Point Keweenaw in the spring and fall the weather is almost constantly stormy, subjecting vessels navigating past that point to great dangers and to tedious and costly delays; and,

Whereas there is no place of refuge above Point Keweenaw for a distance of 175 miles;

Resolved, By the Cleveland Vessel-Owners' Association, as a body, that it is of the utmost importance that the Government obtain control of the Portage Lake Ship

Canal, and improve and deepen the same to at least 20 feet, and establish at the upper or western end a harbor of refuge and make the whole free to commerce.

Resolved, That with sufficient depth of water to accommodate deeply laden vessels the canal would be used to the greatest advantage by through commerce, saving greatly in distance, and also saving in bad weather the dangerous and tedious navigation around Point Keweenaw, besides very often avoiding long delays for weather fit to attempt the passing of the point.

Resolved, That by such improvement any proposed harbor of refuge near the end of Point Keweenaw would be unnecessary and not desirable.

Resolved, That in every sense such ownership, improvement, and use of the canal by the General Government is a matter of truly national interest, the benefits and importance being mainly to the through commerce of the Northwest with the East and the eastern sea-board.

The foregoing preamble and resolutions were presented and *unanimously* adopted at a general meeting of vessel-owners held above date.

B. L. PENNINGTON,
Secretary.

CLEVELAND BOARD OF TRADE.

Report of committee on legislation.

Your committee having considered the resolutions of the Vessel-Owners' Association of this city, recommend the passage by your Board of the following resolution:

Resolved, That the resolutions adopted by the Vessel-Owners' Association for this improvement seems to us of the greatest importance, and we cordially indorse their recommendation. In the opinion of this Board this improvement is one of national importance, and one that Congress should promptly provide for.

HARVEY D. GOULDER,
LEE MCBRIDE,
C. B. LOCKWOOD,
C. A. MUERMAN,
H. S. WHITTLESEY,
Committee on Legislation.

OCTOBER 13, 1886.

The foregoing resolution was unanimously adopted by the Cleveland Board of Trade at the regular meeting to day.

X. X. CRUM,
Secretary.

DETROIT, MICH., *October* 12, 1886.

DEAR SIR: We hand you herewith a letter addressed to the chairman of the Board of United States Engineers appointed for the examination of, and report on, the Portage Lake and Lake Superior ship-canals. We submit this to your reading, and, if you think advisable, for your presentation to the Chairman of the Board.

Very respectfully,

BRADY & CO.

Mr. JOHN DUNCAN,
Chairman of Board of Supervisors.

DETROIT, MICH., *October* 12, 1886.

DEAR SIR: For over thirty years having been intimately connected with and interested in the commerce of the lakes, and directly so with Lake Superior, we take the liberty of urging upon yourself and the members of your Board the great importance, at as early a day as possible, of your recommending to Congress the purchase and improvement of these canals, to be made a free and national water-way.

Since the construction of the present canals the growth and development of the district and industries to which they lead have been so unprecedented and beyond what the original projectors of the way anticipated that they are now really national. The district itself, with its mining and lumber industries, represents the business enterprise and capital of the New England, Eastern, Middle, and Western States, and more largely owned in these sections than at home.

The canals are on the national highway of commerce, and to-day are used not only as a means of traffic but, at times, as a harbor of refuge. But the embargo in the way of tolls placed upon their use by the present owners, a private coporation, greatly bars against them both as a place of refuge at times of storms and for the shortening of the passage from the headwaters of the lake navigation to eastern connections.

We believe that your Board in making your examination will fully see these points, and trust you will be able to give a most [favorable?] recommendation for their purchase.

Very truly,

BRADY & CO.

THE CHAIRMAN OF THE BOARD OF UNITED STATES ENGINEERS FOR THE EXAMINATION OF THE PORTAGE LAKE AND LAKE SUPERIOR SHIP-CANALS.

BUFFALO, N. Y., *October* 12, 1886.

At a meeting of the Board of Managers of the Lake Carriers' Association, held at Buffalo this date, the following resolution was adopted:

Whereas the canals through Keweenaw Point, Lake Superior, known as the Lake Superior Ship-Canal Railway and Iron Company Canal, and the Portage Lake and River Improvement Company Canal can now be purchased by the United States, free of all encumbrances, for about one-tenth of their original cost of construction; and

Whereas these canals are of great advantage to the commerce of Lake Superior, enabling vessels to avoid the dangerous passage around Keweenaw Point, and afford a material saving in distance to the coasting trade; and

Whereas these canals furnish opportunities for very valuable harbors of refuge on either side of Keweenaw Point at moderate expense:

Resolved, That the Board of Managers of the Lake Carriers' Association consider it eminently desirable and proper that the United States should purchase these canals w'h view to improving the same and making them a free passage-way and harbors of refuge.

FRANCIS ALMY,
Secretary.

LAKE MICHIGAN AND LAKE SUPERIOR TRANSPORTATION COMPANY,
Chicago, October 13, 1886.

DEAR SIR: Mr. J. T. Whiting wrote us that he had a conversation with you in reference to the Portage Lake and Lake Superior Ship-Canal matter, in which you are better posted than any one; hence you will be in a position, in connection with the prominent business men of Houghton and Hancock, whom we have written on the subject, to bring the matter clearly before the Government engineers when in session. By Mr. Whiting's request we also wish to inform you that we have paid tonnage tolls on our boats (exclusive of tolls on cargoes) from the opening of navigation in 1879 to the close of navigation, 1885, for a period of seven years, over $28,000, which as you see is a heavy burden on this company. The merchants of Houghton, Hancock, and other towns have no doubt furnished you the particulars as to the tolls paid by them on merchandise. Considering all the influence which has been brought to bear on this matter by the vessel interest, business communities, and Boards of Trade from all the prominent cities and business centers connected with the great lakes, also the petitions which have been prepared and presented to Congress by the aforesaid interests; also please bear in mind that the purchasing of the canals by the General Government is not a loc.. laffair, and that it will simply benefit a few, but that it is a national affair and will be a great benefit to the merchants of Houghton County and the vast growing vessel interest at large, and all who may do business with that part of the country; besides all this, a harbor of refuge is sadly needed, and for which we can only look to the Government for relief. We have every reason to believe that the matter as it will be presented to the Government engineers by yourself and others will be so clear and plain that the engineers will see the necessity of the canals owned and controlled by the Government. And it is our belief that they will cheerfully recommend the purchase of said canals by the Government during the next session of Congress.

Trusting that your efforts will be crowned with success, shall be pleased to hear from you.

I remain yours truly,

JOSEPH AUSTRIAN,
General Manager

HON. JAY A. HUBBELL,
Houghton, Mich.

LAKE SUPERIOR TRANSIT COMPANY,
Detroit, Mich., October 14, 1886.

GENTLEMEN: I understand that your Board is about to convene at Houghton or Hancock, Mich., to examine "in all their relations to commerce the two improved water-ways known as the Portage Lake and River Improvement Company Canal and the Lake Superior Ship-Canal Railway and Iron Company Canal, * * * and the desirability of their acquisition and improvement."

In view of the fact that these water-ways are in the hands of private corporations, empowered to collect tolls on all water-craft of a greater draught than 5 feet, prevents their use by the general commerce of Lake Superior, except upon payment of this direct tax upon the traffic of the country at large, the Portage Lake and River Improvement Company even being impowered to collect tolls on vessels of any and all classes belonging to the United States Government. It is not alone for the removal of this unjust tax upon our lake commerce that we ask your favorable consideration and report upon this matter, and desire to impress upon your Board the fact that having these two water-ways in the hands of the United States, and with the contemplated improvements thereto, will, in our opinion, materially lessen the dangers of navigation on Lake Superior by permitting the use of this passage-way by the large fleets engaged in the transportation of freights to and from the Northwest, in the interchange of commerce between the East and the West, extending from the Atlantic to the Pacific Oceans, the direct natural tendency of the decrease in hazards being to cheapen the cost of moving the products of the country at large, making the benefits to be derived from this one improvement, asked at the hands of the Government, of a *national* character. The latest statistics in our possession at this writing of the business of these two canals are for 1883, and they show that in that year, or rather during the season for navigation for 1883, that there were 838 passages through the Portage Lake and River Improvement Company Canal, aggregating 587,978 registered tons; that imports into the Portage Lake district were 127,737 tons, and the number of first-class passengers as 2,732; also, that the principal exports from the district were 27,646 tons of mineral and refined copper, approximating in value to $6,000,000, and nearly 3,250,000 feet of lumber. These statistics do not refer to or include the large tonnage laden in the water-craft passing through the canals destined for delivery at lake ports east and west, for distribution to all parts of this country, and for export through our seaboard cities, nor do the statistics include the freight and passengers carried by the steamer Ivanhoe, a light-draught boat then making daily trips between Houghton, Hancock, and L'Anse. Having been actively connected with the Lake Superior business for the past forty years, seeing it grow from infancy to its already vast and rapidly increasing proportions, I feel justified in urging upon your Board the importance and great necessity for a suitable harbor of refuge at the westerly entrance, at least, to these canals, for the better preservation of life and property, the loss of which the records show has already been great on the Lake Superior coast, to westward of Point Keweenaw, a good proportion of which, I am confident it can safely be said, might have been saved had there been suitable refuge at this part of the coast. With this passage-way thrown open to commerce, and improved to permit of its *free use* by the larger class of vessels, the long and expensive delays under Point Keweenaw, which are so frequent, especially in the stormy months of spring and fall, will be obviated to a very great extent, thus proving another factor in the aim for cheap transportation.

Trusting that your investigations will demonstrate the importance and necessity of the United States acquiring possession of these canals, and justify you in making a favorable report to this effect, I am,

Very respectfully,

J. T. WHITING,
General Agent.

THE BOARD OF ENGINEERS, UNITED STATES ARMY, FOR EXAMINATION OF THE PORTAGE LAKE CANALS, &C., AS APPOINTED UNDER PROVISIONS OF THE RIVER AND HARBOR BILL APPROVED AUGUST 5, 1886.

APPENDIX C.

CIRCULAR LETTER REQUESTING INFORMATION, WITH RESPONSES.

HOUGHTON, MICH., *October* 20, 1886.

SIR: The Board of Engineers constituted by Special Orders No. 112, Headquarters Corps of Engineers, United States Army, August 13, 1886, to examine the Portage Lake Canals and the water communication across Keweenaw Point, with a view to making them a free passage-way, has received the copy of the resolution upon this subject adopted by the Board of Managers of your association at their meeting held at Buffalo on the 12th instant. In addition to this general expression of opinion the Board of Engineers desires to obtain from the principal persons interested in the navigation of the lakes an expression in writing of their individual views. The Board will be under obligations to you if you will communicate with such of your members as are most largely interested in navigation, and request them to address letters, at the earliest practicable date, to General Henry L. Abbot, Army Building, 33 West Houston street, New York, in which they will give their knowledge and opinions upon the following points:

(1) In what trade they are engaged; whether through or local.

(2) What use is now made by them of the water-way, and of the route outside Keweenaw Point; and why one is used rather than the other.

(3) What use would be made by them of the two routes, and the reasons therefor, respectively, if the canals were improved and tolls removed.

(4) What use would they make of a safe harbor of refuge in this vicinity, whether in Portage Lake or elsewhere.

(5) What depth and width of canal will be required to accommodate the present commerce of the lakes, with reasons.

(6) What depth and width of canal will be required to accommodate the prospective commerce of the lakes, with reasons.

Very respectfully, your obedient servant,

HENRY L. ABBOT,
Colonel of Engineers, Bvt. Brig. Gen.,
President of Board.

FRANCIS ALMY, Esq.,
Secretary Lake Carriers' Association, Buffalo, N. Y.

ESCANABA AND LAKE MICHIGAN TRANSPORTATION COMPANY,
Chicago, October 30, 1886.

DEAR SIR: By request of Board of Engineers constituted to examine the Portage Lake Canal and waters communicating across Keweenaw Point with a view to making them a free passage-way, I will endeavor to answer the six points asked for to the best of my knowledge.

(1) We are engaged in the general commerce of the lakes, including Lake Superior, both through and local.

(2) We use the water-ways and routes mostly outside of Keweenaw Point, because we cannot pass through the Portage River and Portage Lake Canal on account of our steamers being too large or drawing too much water. Would prefer the canal route, especially during the windy season.

(3) Our reasons for preferring the canal are, the route is shorter and cuts off the dangerous passage around Keweenaw Point.

(4) A harbor of refuge at the entrance of Portage Lake Canal would be an immense advantage to us, as we have sometimes to run long distances out of our way for shelter from northwesterly gales, while with a good harbor to enter could proceed on down the canal and save much valuable time and expense.

(5) The depth and width of the canal to accommodate the present commerce and provide a good harbor for entrance should be, depth of water, 20 feet at entrance, and a uniform depth of 15½ to 16 feet on through the canal, with a width of 175 feet if docked or 200 feet if sloping banks. Most of our boats load to 15½ feet, and the above width would be narrow enough, as there is a large business done with tow-barges of large dimensions, requiring more room than single steamers, or single schooners in tow of tugs.

(6) The prospective commerce would require much more depth of water (say 20 feet) and consequently much wider channel (say 250 feet). The commerce of Lake Superior is increasing with rapidity unparalleled in this or any other country, and to keep pace with which we must build much larger craft than we are now using.

Very respectfully yours,

IRA H. OWEN.

General HENRY L. ABBOT.

LAKE SUPERIOR TRANSIT COMPANY,
OFFICE OF THE GENERAL MANAGER,
Buffalo, N. Y., November 3, 1886.

DEAR SIR: In response to your request, made through the secretary of the Lake Carriers' Association, for an expression of opinion with regard to the questions submitted by your Board, relative to the Portage Lake canals, &c., I reply for the Lake Superior Transit Company

(1) "In what trade are they engaged, whether through or local?"

The boats of the Lake Superior Transit Company, at present fourteen in number, are all engaged in through trade between Lake Superior and Lake Erie.

(2) "What use is now made by them of the water-way and of the route outside Keweenaw Point, and why one is used rather than the other?"

All of the Lake Superior Transit Company's boats regularly use the Portage Lake canals on their west-bound trips, except such as have freight for delivery at ports on Keweenaw Point. On their east-bound trips none of the boats can make passage through the canals with their full east-bound cargoes. Our traffic rendering it necessary, certain of the smaller boats of lighter draught are sent through the canals east-bound with short loads to enable them to pass through, and their cargoes are completed at ports below. The larger boats are compelled to make the trip around the point.

(3) "What use would be made by them of the two routes, and the reasons therefor, respectively, if the canals were improved and the tolls removed?"

As stated above, our larger boats are unable to use the Portage canals on their east-bound trips, and must go around the point in all weathers, often being subject to very considerable danger as well as delay. Out of fourteen boats in the line, only four are able to use the canals on their east-bound trips, and these only with short loads. In case the proposed improvements were effected, all of the boats could and would regularly use this route in rough weather or contrary winds as being safe and expeditious. The removal of the toll-charges would, of course, be a very decided inducement to boats to avail themselves of the advantages of this route.

(4) "What use would they make of a safe harbor of refuge in this vicinity, whether in Portage Lake or elsewhere?"

The necessity of a harbor of refuge in this vicinity is generally recognized; and as to the location of it there seems to be no question but that, in case the proposed improvements are effected, the most available and advantageous location would be at both the upper and lower entrances to the canals, being directly in the route which would be sought by the entire Lake Superior fleet in unfavorable weather. The topography of the route from Duluth to the Sault plainly indicates the special advantages of harbors of refuge in such locations. A boat east-bound, which in rough weather would not venture from the shelter of Apostle Islands and attempt the dangerous passage around Keweenaw Point, could make this harbor and continue its passage down through the canals and on to Marquette. And, similarly, a boat west-bound, which would not risk the passage around the point, could work up to and through the canals to the harbor of refuge at the upper entrance, and thus save the time or distance between Marquette and that point.

(5) "What depth and width of canal will be required to accommodate the present commerce of the lakes?"

(6) "What depth and width of canal will be required to accommodate the prospective commerce of the lakes?"

For boats at present engaged in the Lake Superior trade a depth of 17 feet would be sufficient, and a width of 60 feet. The maximum size of lake vessels at present is 350 feet in length, 54 feet in width, and they are so constructed as to load to a draught of 20 feet if the water-ways were this deep.

The Lime Kilns Crossing at Detroit has been deepened to 20 feet, with a view to the prospective draught of future vessels; and General O. M. Poe has recommended that a new lock be built in the Sault Canal and the canal be deepened to at least 20 feet to accommodate the prospective commerce of the lakes. It would be wise in making the improvements to ultimately conform to that depth, with the same object in view of allowing for the growth of the lake commerce and the increase in draught of the vessels, and it seems fair to assume that if the water-way would accommodate a craft 500 feet long and 60 feet wide it would provide for the "vessel of the future."

Yours, truly,

E. T. EVANS,
General Manager.

HENRY L. ABBOT, Esq.,
Colonel of Engineers, Bvt. Brig. Gen.,
President of the Board.

WILSON'S TRANSIT LINE,
Cleveland, Ohio, November 13, 1886.

SIR: In accordance with your request made to the secretary of the Lake Carriers Association, I answer the questions propounded in your letter to him as follows:

(1) My vessels are engaged entirely in through trade with the western end of Lake Superior.

(2) No use made of the water-way. It is not suitable owing to insufficient depth of water, &c.

(3) If the water-way were enlarged and deepened could use the route to great advantage, especially in bad weather.

(4) If entrances made safe we would use as harbor of refuge. It would make the route of very practical value, since we would have all the benefits of a harbor of refuge and at the same time could go forward cutting off Point Keweenaw, and could frequently continue the voyage after so getting past the point.

(5) The depth should be 20 feet and the width 300 feet. With any sea this would be necessary.

(6) Refers to my last answer, but greater width would be an advantage inside in meeting and passing.

In connection with the foregoing answers I would say I have been engaged in and connected with the Lake Superior trade for the past thirty-two years, formerly as master of steamers in both local and through trade.

Of late years my boats have been engaged entirely in the through trade with the head of Lake Superior. I thoroughly advocate this proposed improvement, because it would be used with great advantage, and its benefits would be felt by the general commerce with Lake Superior.

Very respectfully, yours,

THOS. WILSON.

General HENRY L. ABBOT,
New York.

NEW YORK, LAKE ERIE AND WESTERN RAILROAD LINE,
THE UNION STEAMBOAT COMPANY,
Buffalo, November 13, 1886.

DEAR SIR: Referring to your letter to Francis Almy, esq., secretary Lake Carriers Association, Buffalo, N. Y., and dated Houghton, Mich., October 20, 1886.

In compliance with your suggestions therein I desire to make answer for this company to the questions proposed.

(1) The steamers of this organization are engaged in through and local trade on Lake Superior.

(2) The use now made by them of the water-way is mainly of a local character, but through business would be done by that water-way if it was deepened and improved sufficiently to make it practicable; the avoidance of this channel in through business, steamers going the route outside of Keweenaw Point, is entirely for the reason of the present condition of the Portage Lake Canal.

(3) No use would be made of the outside route on through or local east and west bound business if the proposed improvement should be made.

(4) A harbor of refuge at each end of the canal would be of great use, and would be a great protection against disaster.

(5) My idea of the requisite depth and width of the canal would be, for the first 16 to 18 feet and the latter 120 feet. The reasons for this depth and width are that these dimensions are necessary to accommodate the larger class of vessels which would use the canal.

(6) I am of the opinion that the depth and width proposed above would be sufficient for the prospective commerce of the lakes for many years. The reasons for this opinion are that it will be necessary to deepen the channels at other points in the chain of lakes, in order to use a greater depth and width than that I have proposed, and that these improvements will not be accomplished in the near future.

Yours, truly,

W. BULLARD,
General Manager.

General HENRY L. ABBOT,
New York.

CLEVELAND TRANSPORTATION COMPANY
AND MUTUAL TRANSPORTATION COMPANY,
Cleveland, Ohio, November 13, 1886.

DEAR SIR: Replying to your circular letter directed to Francis Almy, secretary Lake Carriers Association, I answer your questions in their order in the circular:

(1) Our vessels are engaged in both through and local Lake Superior trade.

(2) We use the water-way through Keweenaw Point only when delivering freight at Portage Lake ports. The Portage Lake water-way is too shallow for boats loaded to points beyond Keweenaw Point.

(3) The Portage Lake route would be used by steamers bound for ports west of Keweenaw Point, if channels were widened and deepened, and tolls removed, during the season of storms or in stormy weather.

(4) A harbor of refuge at the west entrance of the Portage Lake Canal would be of the greatest benefit and service to all craft navigating the west end of Lake Superior. We have had vessels driven back to the Apostle Islands *three* times, in one voyage, by storms, after reaching a point near the present entrance to the canal. With a sufficient depth of water and proper facilities at said western entrance, vessels could proceed through the canals to Keweenaw Bay, and in many cases of northwest winds proceed on their voyage down the lake, where it would have been unsafe to have attempted rounding Keweenaw Point. In my opinion a harbor of refuge, or a *harbor for entrance*, is of the greatest importance to commerce at the west entrance of the canal, but no "harbor of refuge" is needed in Keweenaw Bay beyond having a wide and deep entrance at the east end of the canal.

(5) The depth of the canals and water-way should be not less than 16 feet to accommodate *present* commerce, but with the proposed deepening of the Sault Canal, the Portage Lake canals should be of equal depth, say 20 feet. The width of the canal should be not less than 300 feet at the entrance to enable vessels to enter with safety in stormy weather, and should be not less than 20 feet in depth at each entrance.

(6) Twenty feet of depth and 300 feet in width is necessary for the prospective commerce of the lakes.

The writer has had twenty-five years' experience in navigating Lake Superior.

Very respectfully,

H. M. HANNA,
Managing Director Cleveland Transportation Company and Mutual Transportation Company.

General HENRY L. ABBOT.

THE ERIE AND WESTERN TRANSPORTATION COMPANY,
Philadelphia, November 16, 1886.

DEAR SIR: I am in receipt from the secretary of the Lake Carriers' Association, of your call of October 20, 1886, for an expression in writing from those interested in the navigation of Lake Superior on the Portage Lake canals questions.

Under date of October 11, 1886, I had the honor of transmitting to your address at Houghton, a general expression of our views on this subject, and take pleasure in now submitting the following replies to your specific queries of October 20, 1886.

(1) This company has a fleet of twenty-one vessels, having carrying capacities of from 2,800 to 1,000 cargo-tons, engaged in the general lake trade, both through and local. Their largest employment is in the through trade, domestic and foreign, moving to and from all points southwest, northwest, and west of Lake Superior, to and including the Pacific coast points.

(2) Five of the vessels are regularly assigned to the Lake Superior trade, and additional vessels are placed in that trade to meet its temporary necessities. Only the smaller boats trading to portage points can make use of the route through the canals. The insufficient depth of water and the burden of the canal tolls now exacted, turn the through laden vessels on to the route outside Keweenaw Point.

(3) If the Portage canals were improved and the tolls removed, the inside route through the canals would be the shortest, safest, and most economical, and therefore the most attractive under all ordinary conditions.

(4) The navigation around Keweenaw Point is frequently very hazardous, and this fact, together with its central location, make it clear that a safe harbor of refuge in or adjacent to the Portage Canal system would be of very great value in decreasing the risks of navigation.

(5) The important commerce of Lake Superior must pass through the Sault Canal and the Sault Ste. Marie River, and the depth of water available there determines the maximum at present needed in the Portage canals. It would be desirable to have a canal width of not less than 125 feet for present use, and as much more as may be practicable.

(6) The prospective commerce of Lake Superior may be expected to employ the largest class of boats used in the lake service. The size of lake vessels has been steadily increased for a number of years, and although they have not yet attained the dimensions of the modern steamships employed in ocean service they are rapidly approximating these limits. Lengths of 350 feet, with 42 and 45 feet beam, have already been reached, and, with the ocean results before us, we may not unreasonably look for a large increase on these dimensions in the near future. The work to be done on the Portage canals and other Government water-ways should be projected with reference to the certain necessity for extending their depth and width from time to time to meet the varying requirements of commerce.

Yours truly,

FRANK J. FIRTH,
President.

General HENRY L. ABBOT.

LEHIGH VALLEY TRANSPORTATION COMPANY,
Buffalo, N. Y., November 23, 1886.

DEAR SIR: I avail myself of your invitation and herein give you an expression of some of my views relative to the advantages to be derived from the enlarging of the Portage Lake canals and from their becoming the property of the United States Government.

(1) Our company have six steamers, aggregating 10,000 tons weight capacity, that ply between Buffalo and the head of Lake Superior. Their mean draught when loaded is about 15 feet.

(2) We use the route outside of Keweenaw Point because of the smallness of the Portage Lake canals.

(3) There are about three months in the season in which the outside route can be used with comparative safety; the balance of the season it would be much safer to proceed through the canals.

(4) The stretch from the Apostle Islands to around Keweenaw Point is about 150 miles, a rocky and very dangerous coast. During the larger part of the season the weather is very stormy, and there is no harbor of refuge for large-sized vessels in this whole distance, and even after passing Manitou Island there is no shelter in an easterly gale. For this reason I think a harbor of refuge at each end of the canal would be of incalculable benefit.

(5) Sixteen feet deep, and for mud cuts I should recommend 200 feet at surface and 100 feet at bottom. The average beam of our steam vessels is about 40 feet, but lumber crafts carrying deck-loads will require 20 feet more.

(6) The indications are that within ten years vessels will be able to carry a depth of 18 feet of water throughout the lakes.

Yours truly,

WM. P. HENRY,
General Manager.

General HENRY L. ABBOT.

LAKE MICHIGAN AND LAKE SUPERIOR TRANSPORTATION COMPANY,
Chicago, November 29, 1886.

DEAR SIR: We beg to communicate with you in relation to the purchase of the Portage Lake and Lake Superior ship-canals by the Government. We wish to say that this is a matter of great importance, not only to commerce, but to the merchants and mining companies of Lake Superior.

We are operating the Lake Superior South Shore Line and running a steamer regularly between Duluth and Portage Lake, stopping at intermediate ports. This steamer has made forty-eight round trips this season, which has necessitated her passing through Portage River ninety-six times, and the tax for tolls on freight and passengers has been a great burden to shippers, consignees, and ourselves. Besides the steamer has frequently been obliged to lay in the upper canal awaiting favorable weather outside, and while so doing recently was run into by a barge passing out and damaged to the extent of upwards of $500. We would also suggest the importance of having the upper canal widened and inlets made, where vessels can lay during stress of weather, thus giving plenty of room for vessels to pass through the canal without colliding with other vessels that may be lying there.

We beg also to suggest that it is of the utmost importance that the Upper Portage Canal be made a harbor of refuge, as it has been demonstrated on various occasions had such harbor of refuge existed there it would have been the means of saving much life and property.

In our opinion the canal piers should be extended further into the lake, and widened to at least 500 feet and dredged to a depth of at least 18 feet. You, no doubt, have posted yourself as to the rapid growth of commerce during the past few years between the lower lakes and important ports at head of Lake Superior, and a free water-way through Portage Lake and the ship-canals would be of inestimable benefit to this vast commerce. Many vessels would seek entrance and passage through there, especially in stormy weather, and thereby save much destruction of life and property. This improvement would not only be of local benefit, but is of national importance, and we hope favorable action will be taken in the matter and the bill passed next session of Congress,

Yours truly,

C. F. A. SPENCER & BRO.

General HENRY L. ABBOT,
Colonel of Engineers, Bvt. Brig. Gen.

LAKE MICHIGAN AND LAKE SUPERIOR TRANSPORTATION COMPANY,
Chicago, November 29, 1886.

DEAR SIR: I beg leave to urge upon you the importance of the Government purchase of the Portage canals across Keweenaw Point, with a view to make them a free water-way.

We are operating and running a regular line of four passenger and freight propellers between Chicago and Duluth, besides a steam-barge and consort which occasionally run over that route.

We have been in the transportation business between Chicago and Lake Superior points for over twenty years, and have used the Portage Lake canals ever since they were constructed and improved; and while they were a great advantage to our boats running through there, still the heavy tolls imposed for the privilege of using the canals constituted a heavy burden on our business, as also on the merchants and mining companies in the Portage Lake district; besides that, the depth of the upper canal is not sufficient to allow our propellers to enter safely in rough weather when there is much sea on.

The commerce on the lake is increasing in large proportions annually.

The importance of the purchase of these canals by the Government, and to make them a free water-way, cannot be overestimated. After the purchase of said canals by the Government they should be deepened so that a vessel that can pass through the Sault Ste Marie Ship-Canal can also go through there without trouble, and the outlet of the upper canal into the lake should have a depth of about 18 feet, and be of sufficient width between the piers so as to serve vessels as a harbor of refuge that can be safely entered during heavy weather. In years past many a vessel and a number of lives have been lost, to my knowlege, for want of a safe harbor in the vicinity of the Portage Lake and Lake Superior Ship-Canal. I know of no improvement on the chain of the lakes which would benefit the lake commerce to a greater extent than the improvements as suggested of the above-named canals by the Government and the making of them free.

I should consider that 150 feet would be of sufficient width for the upper canal, but would consider it desirable that on some point of the canal a space of about 500 feet in length by 60 feet wide would be constructed in connection with the canal, for vessels to lie while waiting for weather to go outside, and this should be constructed as near to the outlet to Lake Superior as possible.

I sincerely hope that in the interest of the general lake commerce this important measure of the purchase and the improvement of the canals by the Government will be passed by Congress at its next session, and that no obstacles will be thrown in its way by any one for party purpose.

Very respectfully, yours,

JOSEPH AUSTRIAN,
General Manager.

HENRY L. ABBOT,
Colonel of Engineers, Bvt. Brig. Gen.

THE WESTERN TRANSIT COMPANY,
NEW YORK CENTRAL AND HUDSON RIVER RAILROAD
LINE OF SCREW STEAMERS,
Buffalo, December 2, 1886.

DEAR SIR: I have received from the secretary of the Lake Carriers' Association your request of October 20 last, that members of the association interested in navigation should address letters to you, expressing their views on the subject of enlarg-

ing the Portage Lake canals, in the form of answers to your six enumerated interrogatories.

I take pleasure in complying with your request in the following answers:

(1) This company owns and runs upon the lakes fourteen screw steamers, with freight cargo capacity varying from 800 to 2,600 tons each. Four of these steamers run on the through Lake Superior route, between Buffalo and Duluth, calling with and for passengers and freight at intermediate ports.

(2) These steamers are frequently required by their traffic to and from Hancock and Houghton to pass through the Portage Lake canals. They cannot be loaded to their full capacity, in consequence of the want of a sufficient depth of water in the canals. They sometimes strike bottom or are grounded and detained seriously by the same cause, and also by the insufficient width of the channels.

(3) If the canals were deepened and widened the steamers now on that route would carry larger cargoes; and if, also, the tolls were removed, larger steamers would be used on that route, and the outside route could and would be avoided in bad weather.

(4) The route outside of Keweenaw Point is often hazardous by reason of its open exposure to the dangerous gales for which Lake Superior is noted. Should the width and depth of the canals be sufficiently increased, a safe harbor would thereby be created, which would be eagerly sought by craft in that vicinity when they encountered bad weather, and they would save time and money by making a safe passage through the canals while the storms would be raging outside the point.

(5) The canals should be 200 feet wide to enable the largest class of steamers to meet and pass with safety, two or three at a time, and 18 feet deep to allow for the occasional fall of water, caused by adverse winds, and to float at all times the largest class of vessels deeply laden.

(6) These dimensions of width and depth would probably be sufficient for all requirements for ten years to come.

Yours, respectfully,

S. D. CALDWELL,
General Manager.

General HENRY L. ABBOT,
President Board of Engineers.

APPENDIX D.

INFORMATION RESPECTING HISTORY OF ROUTE.

WILLIAMSTON, MICH., *October* 28, 1886.

SIR: I have the honor to acknowledge the receipt of your letter of the 25th instant. You ask me to inform the Board of Engineer Officers as to the origin of the work upon Portage River, and the means provided for its execution and cost. I take great pleasure in complying with your request.

Late in the summer of 1859 the work in Lake George, Saint Mary's River, having been brought to a close, I suggested to the contractor, Mr. W. W. Williams, that work might be found at Portage Lake, Lake Superior. I was then acting as civil assistant to Capt. A. W. Whipple, United States Engineers, in charge of river and harbor improvement. I procured leave of absence, and went with Mr. Williams to Portage. He obtained a contract for dredging the river and for constructing a breakwater. The mining companies engaging in the enterprise were as follows: The Quincy, Pewabic, Franklin, Mesnard, Pontiac, Saint Mary's, Albany and Boston, and Isle Royale. Messrs. Sheldon and Douglass, merchants and land-owners, were also parties to the contract. The country was new; the mines were running on assessments, with no dividends as yet earned. Even their final success was doubtful. These companies tendered me the position of engineer of the work. After consultation with Capt. Whipple, in Detroit, I resigned my place under him, and went to Lake Superior, where I dwelt for many years.

The work of opening Portage River was one of necessity to the mining companies. The time had come when something must be done to facilitate business, stop the immense cost and waste caused by the transfer of goods at the mouth of the river-entry, and the cost of towage to the mines. Steamers and other vessels arriving at the entry were obliged to anchor in the offing. Light-draught tugs—for there was only 3 feet of water over the bar at the mouth of the river—came out to them with scows. The cargo was hastily transferred to these scows, which, when loaded, were towed into the river and there the freight was dumped onto the dock. All was hurry and confusion; night and day the work went on; for if a storm arose the vessels in the roadstead would be obliged to cut and run for harbor at L'Anse. Detained in that port until the storm subsided, they would return to the entry and complete their dis-

charge. Hence, the great delay and expense; the ruinous destruction of property. A heavy northeaster would often shoal the bar to such an extent that the tugs could not get out. They had to turn tail to and dredge out a channel with the propellor wheel. The goods on the docks inside were finally reloaded upon scows and towed to the mines, at a cost of $4 per ton, a distance of 14 miles, as much as it costs now to reach salt water from the smelting works. Passengers were also subjected to much delay and inconvenience. The waiting several days at the entry for a boat to arrive—fighting mosquitos, living in Indian huts, and drinking bad whisky—were demoralizing, to say the least.

All that the companies and merchants could raise for the execution of the work was $30,000. They required a 10-foot channel, 80 feet wide at bottom. I stated that, whereas the water in the lakes was then at its highest stage, 10 feet of water would not be sufficient; they should have 14 feet. But they urged 10 *feet must do.* We went ahead. In less than two years the water-level had fallen over 3 feet, leaving us then in dredged channel but 7 feet. Hence renewed dredging, but the mines were better able to bear the expense, and did so.

I immediately began my hydrographic survey at mouth of river. Instead of using the old river-mouth, I went east and laid out a canal through the Tamarack swamp, 1,200 feet long, and set the dredge to work. The breakwater was also located. Only one pier was necessary to prevent the sand moved by the waves in northeast storms from filling up the mouth of the canal. The pier was built in winter, cribs built on the ice and sunk; stone hauled from the quarry on sleighs. During the work the thermometer often varied from 20° to 30° below zero. The superstructure has been rebuilt, but the foundations remain intact after twenty-seven years lapse.

In the month of June, 1860, I piloted the first lake-steamer from Detroit through the canal and river up to the docks in Hancock. This was a great event and marked a new era in the history of Portage Lake. In the fall of 1860 the first contract was completed. Having been appointed at that time superintendent of the Franklin and Pewabic mines, I still, in the interest of those companies, acted as director and engineer. For some years, I believe until after the war, the mining companies held the improvement. They then one by one sold out to the present company. Since the beginning of the work, down to the present time, much money has been expended by both managements in dredging, straightening the river, placing buoys, and repairing breakwater. As the commerce of the lakes increased the tonnage of the vessels was augmented. Greater draught of water has been required, so that now nothing less than 16 feet will do. Consequently there has been dredging and redredging all along the line of lakes, from Duluth to Buffalo.

Just how much money has been expended upon Portage River, from first to last, I have no means of knowing; but I should judge that at least $100,000 have been spent.

The mining companies, under State law, levied tolls upon all freight passing through the river; also upon passengers and the vessel. Though the mining companies, while they controlled the Portage River improvement, paid at least 75 per cent. of the tolls, they received no direct benefit, for the money so collected was put into the work in the way of improvements. They may have received one or two dividends, but I am not certain about it.

The present owners have, without doubt, made much money out of the improvement. The business of Portage Lake has grown into such gigantic proportions, as you know, that the tax, in the way of tolls upon the community, is very great and onerous. Portage River improvement and the Lake Superior Ship-Canal should be made free to the commerce of the lakes. No intelligent, candid mind can reach any other conclusion.

In addition to the above you ask "if I have any information upon these points as to the artificial canal connecting Portage Lake and Lake Superior on the west, additional to that given in your evidence published in House Mis. Doc. No. 50, first session Forty-eighth Congress." I answer I do not know that I have. That Public Land Committee pumped me pretty dry.

I beg in conclusion to call your attention to one important matter outside of the line of your inquiries, yet germane to the subject, namely, the *filling up* of Portage Lake in the vicinity of Hancock and Houghton by the stamp-mills. Originally Portage Lake, a great glacier trough, was here 60 feet deep, with bold shores. Now the lake has been narrowed more than one-half of its original width by the sands. Nor is this all. The huge piles of sand which came under your notice doubtless during your recent inspection are not the sole cause of damage. The water flowing from the stamp-mills not only transports the heavy sands and silt, but is burdened with much fine slime, which is distributed far and wide and finally deposited on the lake bottom in the form of clay, so that the whole lake within range of the mills is surely filling up—not slowly either. Last summer a steamer grounded in midchannel above the bridge. A resurvey of the lake would show an alarming state of things. Something ought to be done *at once* to stop this filling up of free waters.

The mining companies concerned, looking to their own selfish interests, will not pause unless compelled to do so by competent authority. The citizens depending upon the mines for their welfare do not like to antagonize the mining companies. But it does seem absurd for the Government to purchase and keep in repair the entrances to this great port of refuge and commerce, while at the same time the stamp-mills are daily depositing hundreds* of tons of silt into the navigable channel. Very soon the cry will go up for an appropriation to dredge out these very sands to clear the channel.

I hope you will pardon this digression, but the subject it seems to me is one of vital importance—one which every good citizen should consider. Those Portage Lake people should be protected against themselves. General commerce needs protection. At all events the General Government should not be compelled to dance to the tune played by those ponderous stamp-mills.

Respectfully submitted.

JOHN H. FORSTER.

Maj. O. H. ERNST,
Corps of Engineers.

WILLIAMSTON, MICH., *November* 2, 1886.

SIR: Your favor of the 30th is to hand. Permit me to correct one statement in my hasty report. I say the mining companies are depositing "*thousands* of tons of sand *daily*." I should have said "*hundreds* of tons daily."

My remarks would be exactly true if Torch Lake (the site of the Calumet and Hecla, Tamarak, and Osceola mills), which I had in my mind when I penned the sentence, be included.

Very respectfully,

JOHN H. FORSTER.

O. H. ERNST,
Major of Engineers.

Please write *hundreds* in report for *thousands*.

APPENDIX E.

Table showing, in feet, the mean elevation of the surface of Lake Superior above mean tide at New York by months, from observations made above the locks at Saint Mary's Falls Canal, Michigan, beginning November, 1870, *and ending October*, 1886.

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual means, November to November.	Annual means, January to January.
1870.....	.....	.....	.....	.....	.....	.....	.....	....	.....	.....	601. 84	601. 64	.....	.....
1871.....	601. 16	601. 03	600. 74	600. 95	601. 44	601. 85	602. 04	601. 95	602. 00	601. 83	601. 60	601. 24	601. 54	601. 49
1872.....	600. 97	600. 86	600. 66	600. 58	601. 47	601. 60	601. 97	602. 36	602. 43	602. 30	602. 17	601. 75	601. 50	601. 59
1873.....	601. 34	601. 13	601. 17	601. 17	601 70	601. 86	602. 39	602. 60	602. 64	602. 54	602. 42	602. 15	601. 87	601. 93
1874.....	601. 50	601. 34	601. 21	601. 11	601. 60	601. 93	602. 33	602. 36	602. 35	602. 48	602. 37	602. 12	601. 90	601. 89
1875.....	601. 76	601. 46	601. 43	601. 64	601. 97	602. 26	602. 34	602. 36	602. 64	602. 55	602. 26	601. 68	602. 07½	602. 03
1876.....	601. 66	601. 60	601. 43	601. 38	601. 77	602. 74	603. 16	603. 20	603. 22	602. 90	602. 62	602. 13	602. 25	602. 32
1877.....	601. 85	601. 86	601. 75	601. 61	601. 57	601. 87	602. 16	602. 32	602. 07	602. 08	601. 88	601. 67	601. 99	601. 89
1878.....	601. 47	601. 20	601. 13	601. 12	601. 13	601. 62	601. 73	601. 68	601. 44	601. 54	601. 42	601. 23	601. 47	601. 39
1879.....	600. 80	600. 38	600. 21	600. 34	600. 67	600. 88	601. 05	601. 15	601. 09	601. 09	600. 95	600. 56	600. 86	600. 76
1880.....	600. 36	600. 28	600. 19	600. 23	600. 92	601. 73	601. 96	601. 84	601. 99	601. 75	601. 79	601. 54	601. 06	601. 21½
1881.....	601. 19	601. 10	601. 12	601. 04	601. 44	601. 65	601. 87	601. 77	601. 95	602. 44	602. 30	601. 95	601. 57½	601. 65
1882.....	601. 47	601. 37	601. 17	601. 13	601. 52	601. 62	601. 96	602. 05	601. 97	601. 90	601. 84	601. 55	601. 69	601. 62
1883.....	601. 15	601. 04	601. 06	601. 12	601. 13	601. 47	601. 67	602. 02	601. 74	601. 58	601. 43	601. 23	601. 45	601. 39
1884.....	601. 11	601. 08	600. 96	600. 68	601. 15	601. 14	601. 38	601. 42	601. 48	601. 57	601. 62	601. 43	601. 22	601. 25
1885.....	601. 22	601. 13	601. 00	600. 82	601. 37	601. 74	601. 92	602. 13	601. 88	601. 73	601. 65	601. 35	601. 50	601. 49½
1886.....	601. 01	600. 84	600. 84	600. 82	601. 30	601. 46	601. 65	601. 78	601. 64	601. 61	.....	.....	601. 33	.....
Sums ..	20. 02	17. 60	16. 07	15. 74	22. 15	27. 42	31. 58	32. 99	32. 53	31. 89	30. 16	25. 22	25. 28	23. 91
Means .	601. 25	601. 10	601. 00	600. 98	601. 38	601 71	601. 97	602. 06	602. 03	601. 99	601. 88½	601. 58	601. 58	601. 59

* See correction made in letter of November 2, 1886.

Highest mean for one month, September, 1876	603.22
Lowest mean for one month, March, 1880	600.19
Range	3.03
Highest monthly mean, August	602.06
Lowest monthly mean, April	600.98
Range during sixteen years	1.08
Highest annual mean, November, 1875, to November, 1876	602.25
Lowest annual mean, November, 1878, to November, 1879	600.86
Range during sixteen years	1.39
Highest annual mean, January, 1876, to January, 1877	602.32
Lowest annual mean, January, 1879, to January 1880	600.76
Range during fifteen years	1.56
Mean elevation for sixteen years	601.58

APPENDIX F.

Abstract of conveyanees.

[In section 24, township 53 north, range 33 west.]

Grantor.	Grantee.	Instrument.	Date.	Recorded.	Vol.	Page.	Description and remarks.
United States	Abner Sherman and William H. Stevens.	Patent	Feb. 10, 1854	Aug. 12, 1854	2	447	Lot 2, less west 10 acres reserved for light-house purposes.
Abner Sherman and William H. Stevens.	James R. Shaler	Quitclaim	Nov. 15, 1854	Jan. 2, 1855	2	529	Lot 2, less 10 acres reserved as above.
James R. Shaler	Abner Sherman	....do	Oct. 24, 1856	Feb. 2, 1857	3	276	Und. half of lot 2, less 10 acres reserved as above.
Do	William H. Stevens	Warranty	Oct. 24, 1856	Mar. 4, 1857	3	312	Do.
Abner Sherman and wife	Henry W. Nelson	....do	May 11, 1857	July 4, 1857	3	341	Do.
William H. Stevens	.....do	Quitclaim	June 19, 1857	Feb. 24, 1858	3	416	Do.
Henry W. Nelson	Pewabic Mining Company	....do	Jan. 19, 1859	July 10, 1859	4	23	Und two-thirds of und. half of lot 2, less 10 acres reserved as above.
Do	Franklin Mining Company	....do	Jan. 19, 1859	July 10, 1859	4	25	Und, one-third of und. half of lot 2, less 10 acres reserved as above.
Abner Sherman	Elisha T. Loring	....do	Apr. 22, 1862	May 27, 1863	6	64	Und. half of small fraction N, of lot 2, in section 13.
Pewabic Mining Company	Portage Lake, River, and Improvement Company.	....do	Nov. 2, 1863	Jan. 24, 1865	7	397	Und. one-third of lot 2, less 10 acres reserved for light-house.
Franklin Mining Company	Same as above	....do	June 24, 1863	Jan. 24, 1865	7	399	Do.
Isle Royal Mining Company	.....do	....do	Nov. 5, 1863	Jan. 24, 1865	7	400	Do.
Auditor General	Ransom Sheldon	Tax deed, 1872	Mar. 4, 1875	Mar. 25, 1875	A	117	E, part of lot 2 (42.85 acres).

[In section 13, township 53 north, of range 33 west.]

Abner Sherman and William H. Stevens.	James R. Shaler	Quitclaim	Nov. 15, 1854	Jan. 2, 1855	2	529	A small fraction north of and adjoining lot 2, section 24, being in extent on the south 3.95 chains, and bounded on the north by Portage Lake, and containing about $\frac{45}{100}$ acres with no number on map.
James R. Shaler	Abner Sherman	....do	Oct. 24, 1856	Feb. 2, 1857	3	276	Und. half of last-described piece.
Do	William H. Stevens	....do	Oct. 24, 1856	Mar. 4, 1857	3	312	Do.
William H. Stevens	Henry W. Nelson	....do	June 19, 1857	Feb. 24, 1857	3	416	Do.
Henry W. Nelson and wife	Pewabic Mining Company	....do	Jan. 19, 1859	July 10, 1859	4	23	Und. two-thirds of und. half of last described piece.
Do	Franklin Mining Company	....do	Jan. 19, 1859	July 10, 1859	4	25	Und. one-third of und. half of last described piece.
Abner Sherman	Elisha T. Loring	....do	Apr. 22, 1862	May 27, 1863	6	64	Und. half of first described piece.

Pewabic Mining Company	Portage Lake and River Improvement Company.	....do	Nov. 2, 1863	Jan. 24, 1865	7	397	Und. one-third of first described piece.
Franklin Mining Company	.....do	....do	June 24, 1863	Jan. 24, 1865	7	397	Do.
Isle Royale Mining Company	.....do	....do	Nov. 5, 1863	Jan. 24, 1865	7	400	Do.
Elisha T. Loring	.....do	....do	Nov. 6, 1863	Jan. 24, 1865	7	402	Und. half of first-described piece.

[In section 2, township 53 north, range 33 west.]

William Newcombe and wife	Charles H. Palmer	Warranty	Mar. 5, 1851	Mar. 11, 1861	4	551	A strip of land 130 feet in width, running through Grass Point, so called, to 12 feet curve of water on either side thereof, on lot 4. Also a strip of land 100 feet in width off from the S. end of North Point, so called, as designated on the map made by J. H. Forster, being on the SW. ¼ of sec. 2.
State of Michigan	.....do	Patent	Aug. 29, 1860	Mar. 11, 1861	4	554	Lot 7 and island in S. ½.
Do	William Newcombe	....do	Feb. 16, 1860	Mar. 16, 1861	4	564	Lot 4.
Charles H. Palmer and wife	E. T. Loring, trustee	Quitclaim	Mar. 12, 1862	June 19, 1863	5	314	Lot 7 and island in S. ½. Also pieces as described above from Newcombe to Palmer.
Elisha T. Loring	Portage Lake, River and Improvement Company.	....do	Nov. 6, 1863	Jan. 24, 1864	7	402	Lot 7 and island in S. ½. Also pieces as described above from Newcombe to Palmer to Loring.

STATE OF MICHIGAN,
County of Houghton:

I, Thomas D. Meads, register of deeds in and for said county, do hereby certify that the foregoing and annexed is a true and correct abstract of all conveyances of titles to the above-described pieces or parcels of land that appear of record in my office.

In testimony whereof I have hereunto set my hand and affixed my official seal at Houghton, this 8th day of August, A. D. 1884.

THOMAS D. MEADS,
Register of Deeds.

APPENDIX G.

RATE OF TOLLS ESTABLISHED BY THE STATE BOARD OF CONTROL FOR THE LAKE SUPERIOR SHIP CANAL, RAILWAY AND IRON COMPANY.

[Under the provisions of "An act to provide for determining and regulating the tolls," approved Apr 25, 1873.]

AUDITOR-GENERAL'S OFFICE,
Lansing, Mich., July 6, 1878.

Resolved, That the following rate of tolls shall be levied, collected, and paid for the use of the Portage Lake and Lake Superior Ship-Canal: 2 cents per ton of the vessel's enrolled tonnage, each way, for vessels of every size and capacity, using the canal for each trip. Provided, that no toll or other charge shall be collected upon tug-boats, provided they are not employed in carrying freight or passengers, or upon vessels of the United States engaged in the public service.

RALPH ELY,
Secretary Board and Auditor-General.

AUDITOR-GENERAL'S OFFICE,
Lansing, Mich., July 12, 1878.

Resolved, That from and after this date (May 17, 1878) the same tolls that are now collected by the Portage Lake and River Improvement Company upon freight, merchandise, and passengers passing through their improvements, be charged and collected by the Lake Superior Ship Canal, Railway and Iron Company upon all freight, merchandise and passengers, passing through their canal to and from any point on Portage Lake, Torch Lake, or the waters thereof, except on passengers to and from ports in the State of Michigan above said canal, who shall be exempt from tolls.

No tolls shall be collected on through passengers and freights.

RALPH ELY,
Secretary Board of Control.

First class.—Ale, bottled; acid, books, cigars, carpeting, clocks, clothing, camphene, dry goods, in boxes, bales, or trunks; drugs and medicines, furs, feathers, furniture, hops, liquor, in barrels or boxes; musical instruments, malt, oil-cloth, porter, paper, paint, dry; pipes, pianos, powder of all kinds, safety fuze, seeds of all kinds, sewing-machines, stationery, tobacco, veneering, varnish, wine, in boxes, wicking, shall pay at the rate of $1 per ton to said company.

Second class.—Agricultural implements, apples, dried; ale and beer, in barrels; alcohol, boots and shoes, batting, baskets, brooms, blinds, barley, crackers, cider, cabbages, coffee, ground; candy, clothes-pins, dried fruit, doors, eggs, fruits, glass, window; groceries, not otherwise specified; cordage and twine, hair, harness, hollow ware, honey, herrings, in boxes; ink, kibbles, leather of all kinds, looking-glasses, matches, mackerel, mattresses, nuts, oakum, oranges, lemons, pickles, pitch and rosin, putty, paints in oil, poultry, rice, rope, rags, sash, snaths, scales, stoves, stove-pipe, shrubbery and trees, saleratus, starch, saddlery, scythes, shovels and spades, tinware, vegetables, wooden ware, wire, wire-cable, shall pay at the rate of 80 cents per ton to said company.

Third class.—Apples, green; axes, anvils, butter, in crocks, kegs, and barrels; beans, candles, chain, cement, codfish, castings, coffee, in sacks; cheese, grindstones, hardware, iron, in sheets; iron, lard of all kinds; machinery, molasses, nails, oils, peas, spikes, salt, dairy; steel, stoneware, sugar, sirup, soap, tallow, tin-plate, tar, turpentine, shall pay at the rate of 50 cents per ton to said company.

Fourth class.—Bran and shorts, beef, bacon, corn, corn meal, flour, feed, ground; ham, hay, krout, pork, pot and pearl ashes, pig-iron, smelted copper, shoulders, water-lime and other lime, shall pay at the rate of 30 cents per ton to said company.

Miscellaneous.—Brick, 25 cents per 1,000; coal, limestone, and sand, 10 cents per ton; fire-clay, 10 cents per ton; calves, sheep, and fat hogs, 10 cents each; fat cattle and oxen, 40 cents each; horses, 50 cents each; hides, dry and green, 2 cents each; lumber and timber, 25 cents per 1,000 feet; lath and shingles, 10 cents per 1,000; mineral copper, 25 cents per ton; mineral barrels (empty), 3 cents each; store hogs and pigs, 5 cents each; two-year-old steers and cows, 30 cents each; wagons, buggies, and sleighs, 50 cents each.

All goods, wares, merchandise, supplies, and articles not otherwise specified above, *shall pay at the rate of* 50 *cents per ton.*

Cabin passengers, 50 *cents each.*

APPENDIX H.

RATE OF TOLLS OF THE PORTAGE LAKE AND RIVER IMPROVEMENT COMPANY.

We, the undersigned commissioners, appointed by the board of supervisors of the county of Houghton, in the State of Michigan, by virtue of the power contained in section 11 of an act entitled "An act to amend an act entitled 'An act to provide for the formation of companies to construct canals or harbors and improve the same,'" approved March 13, A. D. 1861, and an act amendatory thereto, approved January 18, A. D. 1862, which said amended act was approved the 21st day of March, A. D. 1863, for the purpose of establishing the rate of tolls to be charged by the Portage Lake and River Improvement Company, a corporation organized under said act, the greater part of whose improvements are located within the county of Houghton aforesaid, do fix and establish the following as the rate of tolls to be charged by said company, for the use of their improvements, to wit:

First class.—Ale, bottled; acid, books, cigars, carpeting, clocks, clothing, camphene, dry goods, in boxes, bales, or trunks; drugs and medicines, furs, feathers, furniture, hops, liquors, in barrels or boxes; musical instruments, malt, oil-cloth, porter, paper, paint, dry; pipes, pianos, powder of all kinds, safety fuze, seeds of all kinds, sewing-machines, stationery, tobacco, veneering, varnish, wine, in boxes; wicking, shall pay at the rate of $1 per ton to said company.

Second class.—Agricultural implements, apples, dried; ale and beer in barrels; alcohol, boots and shoes, batting, baskets, brooms, blinds, barley, crackers, cider, cabbages, coffee, ground; candy, clothes-pins, dried fruit, doors, eggs, fruit, glass, window; groceries, not otherwise specified; cordage and twine, hair, harness, hollow ware, honey, herrings, in boxes; ink, kibbies, leather of all kinds, looking-glasses, matches, mackerel, mattresses, nuts, oakum, oranges, lemons, pickles, pitch and resin, putty, paints in oil, poultry, rice, rope, rags, sash, snaths, scales, stoves, stove-pipe, shrubbery and trees, saleratus, starch, saddlery, scythes, shovels and spades, tinware, vegetables, wooden ware, wire, wire-cable, shall pay at the rate of 80 cents per ton to said company.

Third class.—Apples, green; axes, anvils, butter, in crocks, kegs, and barrels; beans, candles, chain, cement, codfish, castings, coffee, in sacks; cheese, grindstones, hardware, iron, in sheets; iron, lard of all kinds, machinery, molasses, nails, oils, peas, spikes, salt, dairy; steel, stoneware, sugar, sirup, soap, tallow, tin-plate, tar, turpentine, shall pay at the rate of 50 cents per ton to said company.

Fourth class.—Bran and shorts, beef, bacon, corn, corn meal, flour, feed, ground; hams, hay, kraut, pork, pot and pearl ashes, pig-iron, shoulders, water-lime and other lime, shall pay at the rate of 30 cents per ton to said company.

Miscellaneous.—Brick, 25 cents per 1,000; coal, limestone, and sand, 10 cents per ton; fire-clay, 10 cents per ton; calves, sheep, and fat hogs, 10 cents each; fat cattle and oxen, 40 cents each; horses, 50 cents each; hides, dry and green, 2 cents each; lumber and timber, 25 cents per 1,000 feet; lath and shingles, 10 cents per 1,000; mineral copper, 25 cents per ton; mineral barrels (empty), 3 cents each; store hogs and pigs, 5 cents each; two-year-old steers and cows, 30 cents each; wagons, buggies, and sleighs, 50 cents each.

All goods, wares, merchandise, supplies, and articles not otherwise specified above, shall pay at the rate of 50 cents per ton.

Cabin passengers, 50 *cents each.*

All sail vessels, steamboats, or propellers drawing over 5 feet of water, shall pay a toll of 2 cents per ton to said company, on the registered tonnage of said vessel, steamboat, or propeller, for each passage up and back, through any of said improvements: *Provided*, That no vessel, steamboat, or propeller shall be liable to any charge for tonnage, duties, or tolls, for passing either in or out through the improvements of this company, on her return from upper points, in case she has passed through, reported, and paid tonnage, tolls, or duties on her upward passage.

All boats, vessels, or rafts drawing less than 5 feet of water are entitled to use said improvements free of charge.

In witness whereof we have hereunto set our hands, this 15th day of June, A. D. 1863, at the village of Houghton, county of Houghton, State of Michigan.

THOS. J. BROWN,
JAMES A. CLOSE,
S. S. ROBINSON,
Commissioners.

AMENDED RATE OF TOLLS OF THE PORTAGE LAKE AND RIVER IMPROVEMENT CO.

In accordance with a compromise entered into, by and between a committee appointed by the Portage Lake and River Improvement Company and the board of supervisors of Houghton County, to establish a rate of tolls to be charged by said company for the season of 1885, and until futrher notice, the following rate of tolls is hereby fixed and established, viz:

On all articles enumerated in original rate of tolls, and included in first and second classes of said tariff, the sum of 50 cents per ton shall be collected by said company.

On all articles enumerated and included in third and fourth classes of said tariff (except smelted copper and lime), the sum of 25 cents per ton shall be collected by said company.

Miscellaneous.—Smelted copper, 20 cents per ton; mineral copper, 15 cents per ton; lime, 10 cents per ton; coal, 7 cents per ton; limestone, sand, and fire-clay, 5 cents per ton; brick, 15 cents per 1,000; lumber and timber, 10 cents per 1,000 feet; lath and shingles, 5 cents per 1,000; horses, 25 cents each; fat cattle and oxen, 25 cents each; steers and cows, 25 cents each; calves, sheep, and hogs, 5 cents each; wagons, buggies, and sleighs, 25 cents each; hides, dry and green, 2 cents each; mineral barrels, 1 cent each.

Cabin passengers, nothing.

All goods, wares, merchandise, supplies, and articles not otherwise specified above, shall pay at the rate of 25 cents per ton.

Tonnage toll on sail vessels, steamboats, or propellers drawing less than 5 feet water, same as heretofore.

JAMES PRYOR, *Agent.*

APPENDIX I.

Memorandum of steamers, vessels, and tugs paying tolls for use of the Lake Superior Ship-Canal, from seasons of 1873 *to* 1886, *inclusive, and total registered tonnage of same.*

Date.	No.	Class.	Tonnage.	Date.	No.	Class.	Tonnage.
1873	41	Steamers	23,256	1878	259	Steamers and propellers	218,146
	4	Vessels	1,142		106	Tugs	9,458
			24,398		6	Vessels	1,085
							228,689
1874	97	Steamers	41,028				
	222	Propellers	176,804	1879	271	Propellers	231,936
	37	Tugs	1,499		40	Tugs	4,002
	35	Vessels	2,732		6	Vessels	1,151
			222,063		3	Steamers	1,096
							238,185
1875	114	Steamers	54,056				
	211	Propellers	152,086	1880	30	Steamers	32,900
	19	Vessels	1,439		259	Propellers	218,227
	41	Tugs	1,756		11	Vessels	4,626
			229,537		16	Tugs	968
							256,721
1876	45	Steamers	29,784				
	252	Propellers	157,275	1881	327	Steamers and propellers	274,192
	106	Tugs	4,066		15	Vessels	5,446
	3	Vessels	165				279,638
			191,290				
				1882	391	Steamers and propellers	338,479
1877	28	Steamers	19,292		27	Vessels	10,469
	278	Propellers	185,324		44	Tugs	2,930
	130	Tugs	5,116				
	11	Vessels	1,389				351,878
			211,121				

In 1883, a new method of measurement of vessels was adopted, which reduced the tonnage about one-fifth.

Tonnage charged by new measurement, one-fifth off.

Date.	No.	Class.	Tonnage.	Date.	No.	Class.	Tonnage.
1883	438	Steamers and propellers ..	298,062	1885	314	Passenger steamers and propellers.....	253,479
	44	Vessels	13,575		136	Steam barges	109,402
	10	Tugs	748		41	Vessels (sail)	15,500
			312,385				378,381
1884	451	Steamers and propellers ..	345,579				
	53	Vessels	15,362	*1886	385	Steamers and propellers ..	285,416
	25	Tugs	4,437		31	Vessels	14,249
					49	Tugs	2,576
			365,378				302,241

* To September 30.

MEMORANDUM OF RECEIPTS AND EXPENSES OF THE LAKE SUPERIOR SHIP-CANAL FROM 1874 TO 1883, INCLUSIVE.

Total receipts of tolls		$75,053 13
Total expenses for repairs and dredging		70,146 79
		4,906 34
Total receipts of Lake Superior ship-canal from 1874 to 1883, inclusive		75,053 13
Income from season of 1884 from tolls		9,585 08
Income from season of 1885 from tolls		10,115 50
		94,753 71
Income from season of 1886 to September 30		6,439 88
		101,193 59

CONTRA.

Total expense of repairs and dredging canal, and all other expenses incurred in operating the Lake Superior ship-canal, from 1874 to 1883, inclusive		$70,146 79
Expense for 1884, repairs, dredging, and superintendence		8,368 20
Expense for 1885, repairs, dredging, and superintendence		5,997 92
		84,512 91
		16,680 68
Expense for 1886 to September 30, about		5,000 00
Total net income		11,680 68

Statement of business through Lake Superior Ship-Canal, season of 1885.

Miscellaneous freights delivered at Portage Lake	tons..	7,790
Coal	do...	826
Powder	do...	101
Logs and lumber	feet..	828,670
Cabin passengers reported		583
General merchandise delivered and reported up to September 30, about	tons..	5,500
Cabin passengers reported delivered at Portage Lake		580
Powder reported	pounds..	32,750

JAMES PRYOR,
Superintendent.

APPENDIX K.

Yearly expense of repairs, dredging, and superintendence of the canal of the Portage Lake and River Improvement Company from 1872 *to* 1885, *both inclusive.*

1872	$1,713 66	1880	$7,940 61
1873	1,095 07	1881	7,138 79
1874	4,440 27	1882	7,681 49
1875	24,151 79	1883	7,980 55
1876	12,189 92	1884	6,829 61
1877	11,562 29	1885	5,081 68
1878	12,508 85		
1879	10,441 13	Total	120,755 71

Total dredging expense from 1872 to 1885, inclusive	75,118 72
Pier works and cribs during same period	10,598 74

JAMES PRYOR,
Agent.

APPENDIX L.

MEMORANDUM OF STEAMERS AND VESSELS PASSING THROUGH PORTAGE RIVER, AND AMOUNT OF IMPORTS AND EXPORTS FOR THE YEARS 1884 AND 1885, AND TO OCTOBER 12, 1886.

Steamers and vessels passing through Portage River.

	1884.		1885.		To October 12, 1886.	
	No.	Tons register.	No.	Tons. register.	No.	Tons. register.
Steamers	531	371,397	517	378,595	432	304,625
Vessels	232	85,836	203	77,548	177	68,464
Total	763	457,233	720	456,143	609	373,089

Imports and exports, 1884.

Coal, limestone, and fire sand imported	tons..	95,041
Merchandise, machinery, feed, grain, &c	do...	25,337
Powder and high explosives	do...	300
Refined copper shipments	do...	22,572.1599
Mineral copper shipments	do...	8,625.1371
Lumber shipments	feet..	4,039,321
Common and fire brick imported		425,000
Cabin passengers delivered at Portage Lake		1,209

Imports and exports, 1885.

Coal, limestone, coke, and sand imported	tons..	90,603
Miscellaneous freight, merchandise, &c	do...	22,804
Powder, high explosives, and hay	do...	490
Refined copper shipped	do...	18,681.341
Mineral copper shipped	do...	9,273.842
Lumber shipped	feet..	3,474,902
Common and fire brick imported		605,000

Imports and exports, 1886, *to October* 12.

General merchandise imported	tons..	15,607
Pig-iron imported	do...	600
Powder imported	do...	219
Coal, coke, limestone, and sand imported	do...	87,347
Brick imported	M...	475,000
Lumber shipped	feet..	4,170,000
Refined copper shipped	tons..	19,922
Mineral copper shipped	do...	7,300

JAMES PRYOR,
Agent.

APPENDIX M.

INCOME OF THE PORTAGE LAKE AND RIVER IMPROVEMENT COMPANY FOR THE YFARS 1884 AND 1885.

1884		$33,968 01
1885		$26,142 08
Total amount of dredging to June, 1862	cubic yards	397,100
Dredging done by W. W. Williams in 1863 and 1864	do	66,666
Amount of subsequent dredging	do	349,941

JAMES PRYOR,
Agent.

APPENDIX N.

REPORT ON SURVEYS MADE BY ORDER OF THE BOARD.

UNITED STATES ENGINEER OFFICE,
Saint Paul, Minn., December 8, 1886.

MAJOR: I have the honor to submit the following report on a survey and examination of Portage Lake and Lake Superior Ship-Canal, a portion of Portage Lake at Houghton, Mich., and of Portage River and entrance to Portage Lake, or the water-route from Keweenaw Bay to Lake Superior through Portage Lake.

On September 21 received a telegram from you to report in Saint Paul to fit out party for the above survey. Mr. A. J. Stibalt and Mr. S. L. Rice were engaged as assistants, and Mr. F. L. Dever as recorder, and, with a surveying outfit of instruments, stationery, &c., the party left Saint Paul for Houghton, Mich., on September 29 and arrived there on the evening of the 30th.

The small steamer Annie R. Hennes was engaged to prosecute the work. The survey of the ship-canal was made first, as being most needed for meeting of the Board of Engineers at Houghton on October 16. The survey of this canal was made as follows, according to instructions received from you:

NATURE OF SURVEY.

Each bank of the canal was carefully chained and each 100 feet marked plainly. Soundings were taken across the canal at each 100 feet, and 20 feet apart. A heavy insulated copper wire about 180 feet long was marked at each 20 feet, and with this stretched across the canal at each 100 feet the soundings could be made very accurately. A cedar pole 17 feet long, carefully marked to tenths of a foot, was used for soundings. A gauge was set near the United States life-saving station, being about midway between Portage Lake and Lake Superior. This gauge was set the same day as one at Houghton, both gauges being set to read 1 foot on that day, or the zero of the gauge was on an average 1 foot below the surface of the water.

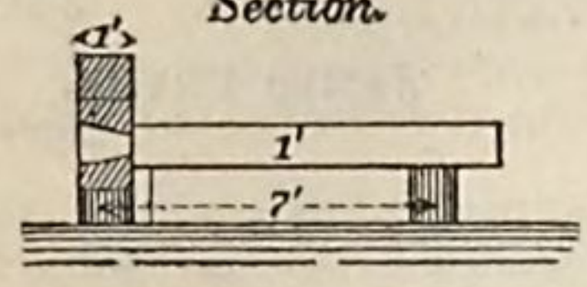
Careful cross-sections were taken at each 500 feet in length of canal, the levels extending back 300 feet from revetment on each side. For the low-land and bog near Lily Pond the cross-sections were taken at each 1,000 feet, as there was but slight change of level at this end of the canal.

The Lake Superior entrance to the canal is protected by solid crib-work or piers 20 feet wide. With this crib-work the canal begins to widen on the west side at an angle of 37½° to the direction of the canal until it is carried out to 190 feet from center line of the canal. From thence the crib-work is parallel with direction of the canal for 375 feet. This west line of crib-work is then changed in direction 87° towards the center till its inner face is 130 feet from center line. Thence it extends parallel with the direction of the canal to the outer end 390 feet. At the outer end there is a large crib 61 feet in width and 30 feet in direction of the canal, to give strength and protection to the outer end. On the east side the crib-work begins 20 feet farther out towards Lake Superior, and runs parallel with canal for 60 feet, then widens at an angle of 20° to the line of the canal, until it reaches a point where inner side of crib is 115 feet from center line of canal. It then extends directly out in the lake on line of canal with width of 20 feet for 500 feet, then with a width of 32 feet for 130 feet more, or to within about 40 feet of being as far out as the crib-work on the west side. The distance between the piers at the outer end is 240 feet.

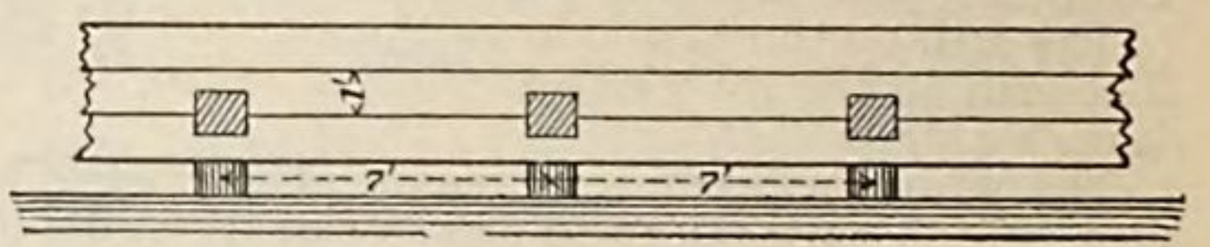
The revetment of the canal banks commencing at the Lake Superior or upper end is as follows: From the crib-work inward for 500 feet, two rows of piles are driven 7 feet apart and 7 feet between the rows. The front row of piles is capped by timbers 1 foot square, there being three cap timbers bolted to the piling and to each other with

1-inch square iron bolts from 1½ to 2 feet long. The piling are sawed off about 6 or 8 inches above surface of water as observed during this survey. This front part of revetment is strengthened by tie timbers dovetailed into the front timbers between the lower and second pieces and bolted to the pile directly back of front row 7 feet, the head of the back pile being sawed off to receive this tie on a horizontal from its connection with front timbers. Sheet-piling 4 inches thick are driven so as to face on the back part of the cap timbers to which the sheet-piling is spiked (see sketch).

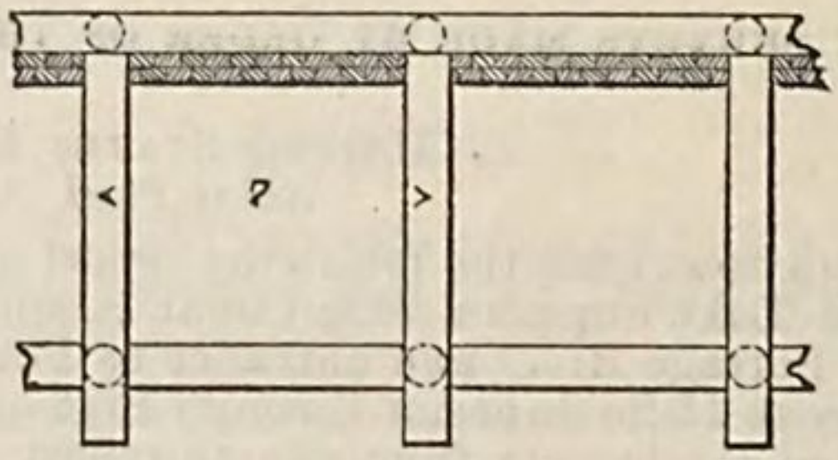
Section.



Front View.



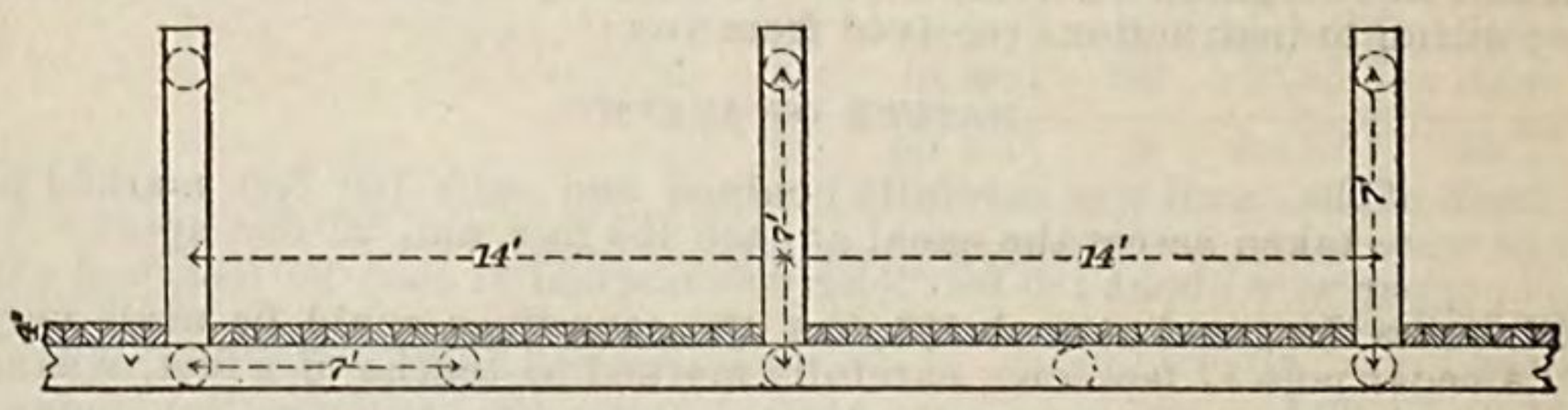
Plan.



The revetment is the same on both east and west sides of the canal, the width between the revetments being about 100 feet.

From this point, 500 feet from the piers, the revetment changes, only having two cap timbers, and the tie timbers only occur every 14 feet, as shown in sketch.

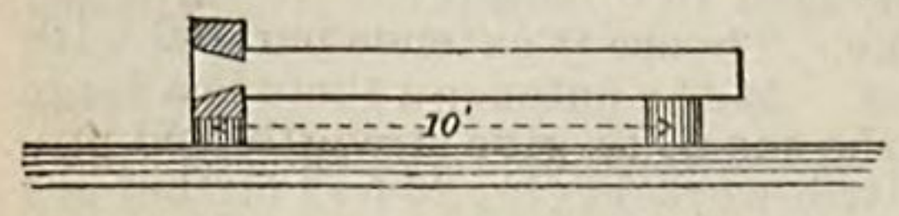
Plan.



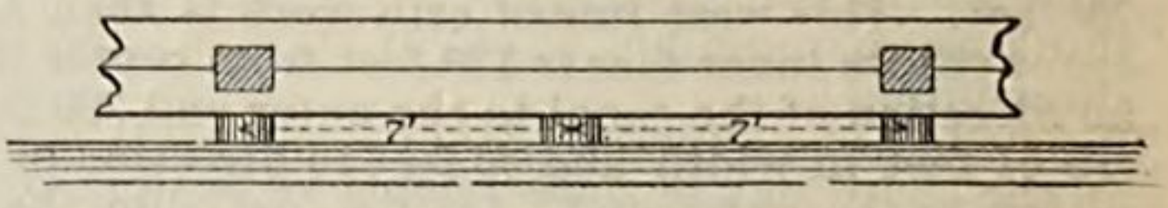
This extends on both sides of the canal down to within 400 feet of turning point 1, (T. P. 1), or about 3,770 feet. From this point to T. P. 2, or for 850 feet, there is a cap timber on the back row of piling. From T. P. 2 to T. P. 3, 360 feet, the back row of piling is only 6 feet back of front row, the form of construction remaining the same.

From T. P. 3 down until we cross Lily Pond, back cap timber is wanting on both the east and west sides, and the capping on the west side consists of only one timber 1 foot square. This extends for 1,200 feet. From this point through Lily Pond and for about 1,900 feet to a point 520 feet below T. P. 5, the construction is as follows: There is no sheet-piling on either side. The east side is constructed as shown by sketch.

Section.

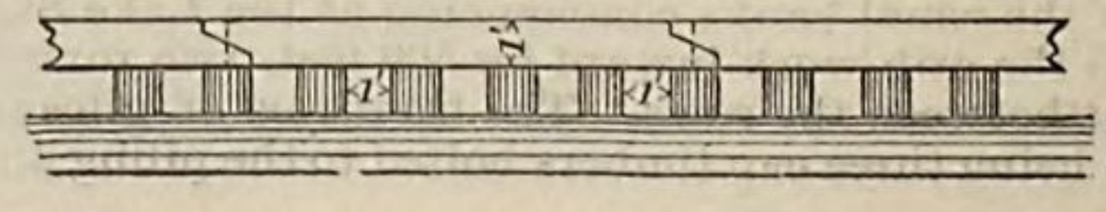


Front View.



The west side from opposite point 1,200 feet below T. P. 3 consists of piles driven 1 foot apart with one cap timber 1 foot square connected with back piling every 10 feet as in sketch below:

Side View.



This form continues for about 1,900 feet, or to opposite 520 feet below T. P. 5.

From this point both east and west revetments change and there is sheet-piling again. The piles are driven 7 feet apart and with rear line of piling 7 feet back. There are two cap timbers and tie timbers every 7 feet, all the same as at the other end of the canal. This extends to a point 400 feet below or south of T. P. 6, or for about 2,603 feet. From opposite this point on the west side, the revetment is again changed to piling, driven 1 foot apart and one cap timber, which extends down to crib in Portage Lake, or for 630 feet. There is no piling back of this line and consequently no tie timbers, and the condition of the revetment is very bad, the cap timbers and piling being missing in some places. On the east side the revetment from this point, 400 feet below T. P. 6, continues the same for 250 feet as above the point, except an extra row of piles 14 feet back of face of revetment, and then for 280 feet more, or to the crib, there are three cap timbers.

The crib on the east side at the end of the revetment contains the beacon light. The crib on the west side at the end of the revetment is about 20 feet square, but contains no signal.

The width between revetments at the lower end or in Portage Lake, is about 210 feet, which narrows up to 125 feet at T. P. 6 and to 100 feet 200 feet farther up the canal.

BORINGS.

For borings to test the banks and bottom of the canal, an apparatus consisting of two pieces of 1-inch gas-pipe was made, the lower length being 17 feet and the upper 10 feet, coupled together with an ordinary coupling. The lower end was drawn to a point, and a 2-inch auger welded to the pipe. Clasp arms of iron, made to set at any point, were used to handle the apparatus.

At the Portage Lake and Lake Superior Ship Canal borings were made as follows:

At point in canal near outer end of revetment, or at beginning of pier-work, and about 18 feet from west edge of the canal, in 14 feet depth of water. Sand and stones (most likely a deposit since the canal was built) were met with till a depth of 16 feet, then hardpan to a depth of 20.5 feet, beyond which it was impossible to bore with the apparatus used. Also at point opposite Red Store, 30 feet from east revetment, in 13 feet depth of water. To a depth of 19 feet below water surface only sand was met with. From this point to 21 feet below surface a mixture of hardpan and sand was met with.

Another boring was made about 50 feet south of the United States life-saving station on east side of canal. Soft material was met with till down 17.9 feet below water surface; then hardpan and gravel were encountered, and we could not reach a greater depth with apparatus. Through Lily Pond and down to Portage Lake the bottom, so far as examined, was quite soft to a depth of 21 feet.

BED OF HARDPAN.

As to the material in the banks of the canal, we have the following statement from Mr. James Pryor, superintendent of the Portage Lake and Lake Superior Ship Canal Railway and Iron Company:

"There is a continuous bed of hardpan, beginning a little north of the United States Lake Survey station, and extending out into the lake as far as we dredged to give 20 feet of water, its surface or upper portion conforming to the general topography of the land through which the canal is cut, rising higher through the deep portion of the cutting near Lake Superior, and sloping south according to the surface of the canal bank. At the Red Store it is found about 3 or 4 feet below the surface of water, and gradually increasing in height till midway between Store and lake shore it reaches to the surface of water, and from thence to the Government light-house it reaches above the water, till at the lake shore and under the light-house it is 5 or 6 feet above water line, so that practically all the dredging required to deepen or widen the canal at upper end would be hard digging. If the surface burden of sand was removed pretty well back from the proposed new line of enlargement, I think there would not be any trouble to secure the canal bank with good, substantial sheet-piling."

At the Lake Superior end of the canal it is about 1,600 feet from the general trend of the shore out to 25 feet depth of water, and at the Portage Lake end it is about 4,500 feet to the same depth. The dredging in Portage Lake would be mostly sand and loose material, while in Lake Superior there would undoubtedly be hardpan beneath a thin layer of drift sand.

MAPS.

The map of the canal portion of this survey is made on a scale of 1 inch = 100 feet and one giving approaches to canal at each end on a scale of 1 inch = 400 feet.

STAMP-MILL DEPOSITS.

A survey of Portage Lake at Houghton and Hancock was made to determine encroachments made in the lake channel by the débris of the copper stamp-mills. This survey extends from about one-half mile above, or west of, the refuse or dump of the Atlantic mine stamp-mill, to about 3 miles below the old Isle Royale dump, which covers all territory occupied by the copper stamp-mills on Portage Lake. This encroachment in the most extreme case amounts to about 900 feet, reducing an original channel from about 1,300 feet to 400 feet, or to only 350 feet between the dock line oppositeand the face of the dump. This survey was carefully made and checked by a system of triangulation from a carefully chained base on railroad track in Hancock. Careful cross-sections were made with level at each dump.

The map of this survey was made on a scale of 1 inch = 400 feet.

PORTAGE RIVER.

The survey of Portage River extends from 35 feet depth of water in Portage Lake to a depth of 33 feet in Keweenaw Bay, including the whole river bed and cuts. This survey was also covered with a system of triangulation from a carefully chained base.

The original channel or bed of the river was sounded by diagonal lines from bank to bank as in ordinary surveys, while the cuts that were made by the Portage River Improvement Company to straighten the channel were examined as in Portage Lake and Lake Superior Ship-Canal, the lines of sounding being 100 feet apart, and soundings 20 feet on line of cross-section.

Borings were also made along bed of river and in cuts at several different places, only sand and soft bottom being met with all along the river and out into Keweenaw Bay, except at Cut No. 4, Church's Landing, in 15.4 feet depth of water, where sand, gravel, and stones were found to a depth of 19.1 feet below water-surface, where rock was encountered that could not be penetrated with this boring apparatus. Several points were tried in the immediate vicinity with same result. As stated by Mr. Pryor, this rock is a shaly sandstone, and extends in quite regular strata from this cut to the head of Portage River, or to within a few hundred feet of Portage Lake, but only occurring in that part of the river bed and banks on line from this cut (No. 4) to the head of the river, and is not met with in the bend of the river between these points.

Cross-sections were made at both outer and inner end of Cut No. 1, or the entry from Keweenaw Bay, at Pacific Dock, and at Cuts Nos. 2, 3, and 4. There is no revetment of banks in the cuts along Portage River, the banks apparently holding in place quite satisfactorily.

WATER-GAUGES.

A gauge was also set in Portage River to correspond with the Houghton gauge as nearly as possible, being spiked to a pile in Mr. John Hallè's dock (Union Dock).

These three gauges, viz, at Portage River, at Houghton, and at Portage Lake and Lake Superior Ship Canal, were all connected with good permanent bench-marks. The survey of Portage River is mapped on a scale of 1 inch = 400 feet.

The gauge-readings during these surveys were not subject to extreme changes during such weather as soundings could be taken, generally ranging from 0.9 feet to 1.1 feet during heavy wind storms, or just after there would be more extreme high or low readings, according to the direction of the wind, the greatest range being from 0.7 feet to 1.3 feet; but such extreme high or low readings would only last for a few minutes.

To determine average stage of water during this survey, in reference to lowest water, or the stage for other known periods, careful levels were taken between the surface of the lake and three well-established bench-marks at Marquette, Mich., the work being done on November 9, during general calm and fair weather, the gauge at Houghton being carefully read at 9 a. m., on leaving that place for Marquette. From this data the surface of the lake on that day was found to be 601.32 feet above sea-level, and from examinations of gauge-readings at Sault Ste Marie, during this survey, the above result was found to give a close agreement. The gauge-readings both at Duluth and Sault Ste Marie, for several years back, were used to arrive at a low-water determination, which gave a result that corresponded very closely to an actual determination in Portage River from data furnished by Mr. John Hallè at Union Dock, he having observed a low-water point in front of a small dock used by his family for obtaining water from the river, the rocky bottom in front of the dock just showing at surface of water during the low period. Mr. Hallè has lived at this point for twenty years. From all low-water data it was found to be about 1 foot lower than the average stage for this survey, or 600.4 feet above sea-level.

ESTIMATE FOR 16-FOOT DEPTH.

The examination of the ship canal as to depth shows a somewhat irregular bottom, and although a great part of the length of the canal would admit the passage of boats drawing 15 feet of water, yet there were several places where not more than a draught of 13 feet could be carried, which reduced the capacity of the canal to that draught. To increase the depth to correspond to the 16 feet as adopted for the chain of lakes would require the removal of the following amount of material:

70,000 cubic yards hard pan, at 80 cents	$56,000
90,000 cubic yards soft material (in canal), at 20 cents	18,000
125,000 cubic yards soft material (in Portage Lake), at 20 cents	25,000
Total	99,000

This amount would deepen the canal for a width of 70 feet in the center, leaving 15 feet on either side as at present, so as not to disturb the revetment. In Lily Pond for about 300 feet the deepening was allowed for over 100 feet in width. There was also allowed an increase of 1 foot in depth in center for keels of vessels. Portage Lake would be deepened for 300 feet in width to 17 feet depth. The above depth of 16 feet refers to low water or to a plane 600.4 feet above sea-level.

To carry this draught of water through to Keweenaw Bay would require dredging in Portage River as follows:

Soft material, 146,500 cubic yards, at 20 cents	$29,300
Stones, gravel, &c. (in Cut No. 4), 2,600 cubic yards, at 25 cents	650
Total	29,950

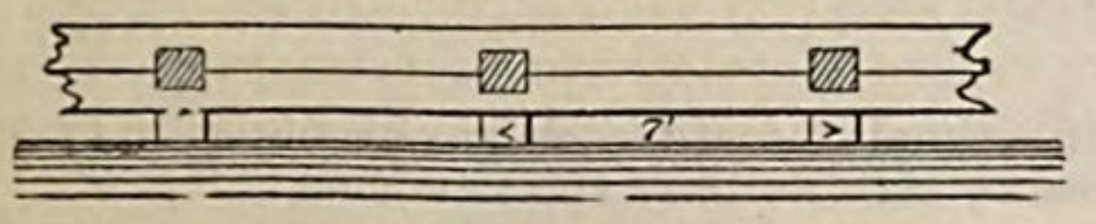
This amount might have to be increased somewhat at the cuts unless the banks at these points were to be revetted. The total length of actual cuts in Portage River is about 3,300 feet. For about one-fourth the length of the river the present channel would fill the requirements, and at several points there is extra width of good depth of water that would allow steamers and fleets to pass each other safely in severe weather.

In the ship canal the revetment is in poor condition throughout its entire length, and to put the work in good shape would require a renewal. Some of the piles and timbers might be used in a renewal, but the cost of removing the old material would probably be as great or greater than the value of the material that could be used. Hence an estimate is submitted for new revetment throughout.

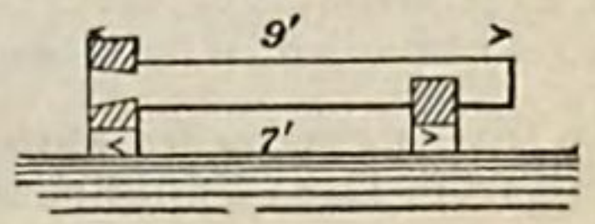
For 100 feet of revetment.

30 piles, 1 foot diameter, 20 feet long	linear feet..	600
3 longitudinal timbers (1 by 1 foot), 300 linear feet	feet, B. M..	3,600
15 tie timbers (1 by 1 foot), 135 linear feet	do.....	1,620
200 planks (1 foot by 4 inches), 16 feet long	feet, B. M..	12,800
15 iron bolts (1 inch by 1 inch), 3 feet each	pounds..	150
15 iron bolts (1 inch by 1 inch), 2½ feet each	do....	125
400 spikes ($\frac{7}{16}$ inch by 8 inches),	do....	200

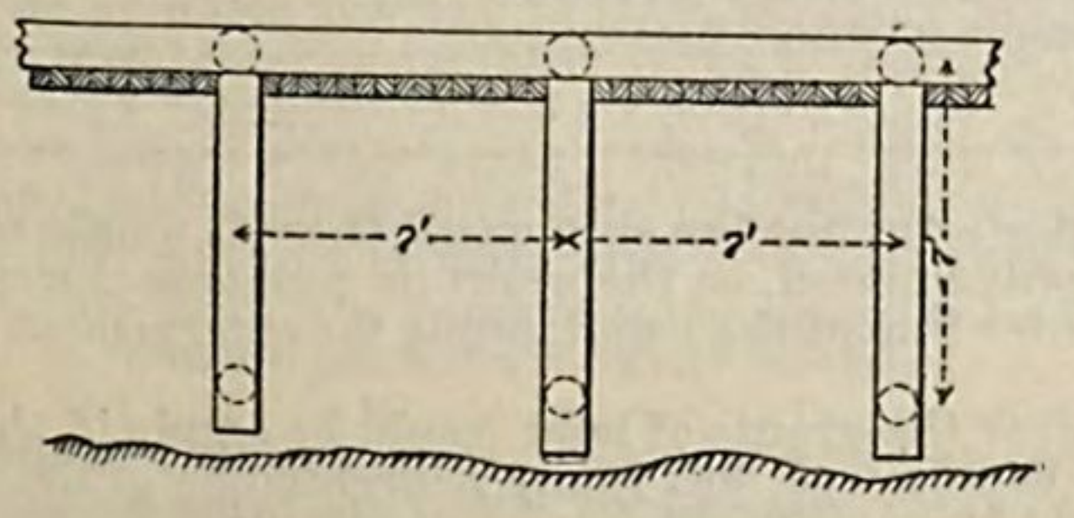
Front View.



Section.



Plan.



Estimated cost for 100 *feet in place.*

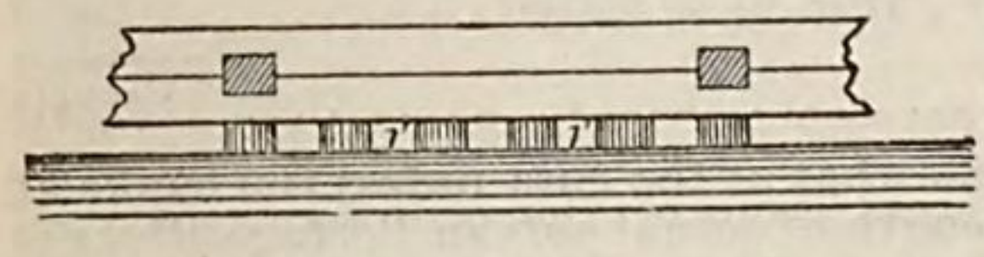
Piling, 600 linear feet, at 20 cents	$120 00
Square timber, 5,220 feet, B. M., at $25	130 50
Plank, 12,800 feet B. M., at $30	384 00
Iron bolts, 275 pounds, at 5 cents	13 75
Spikes, 200 pounds, at 5 cents	10 00
Total cost for 100 feet	658 25
For 20,000 feet	131,650 00

The revetment for Lily Pond would not need sheet-piling and could be made as in present construction on west side, only using two cap timbers, instead of one as at present.

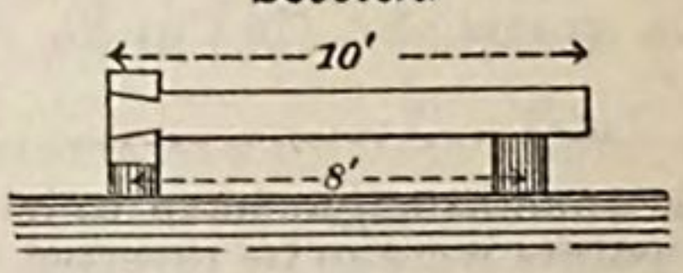
For 100 *feet of revetment.*

60 piles (1 foot in diameter), 25 feet long each	linear feet..	1,500
2 timbers (1 foot by 1 foot), 100 feet long each, 200 linear feet	feet, B. M..	2,400
10 timbers (1 foot by 1 foot), 10 feet long each, 100 linear feet	do....	1,200
50 iron bolts (1 inch by 1 inch), 3 feet long each, 150 linear feet	pounds..	500
10 iron bolts (1 inch. by 1 inch). 2 feet long each, 20 linear feet	do....	67

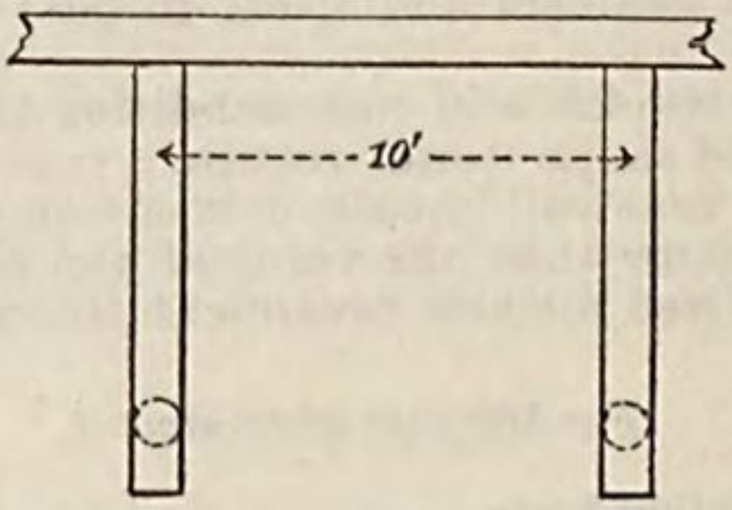
Front View.



Section.



Plan.



Estimated cost for 100 *feet in place.*

Piling, 1,500 linear feet, at 20 cents	$350 00
Square timber, 3,600 feet B. M., at $25	90 00
Iron bolts, 567 pounds, at 5 cents	28 35
Total per 100 feet	468 35
For 4,000 feet	18,734 00
For revetment of whole canal	150,384 00

To give a condensed statement of estimated cost for clear channel-way of 16 feet depth from Lake Superior to Keweenaw Bay we have the following:

Total cost of dredging in ship canal	$99,000
Total cost of dredging in Portage River	29,950
Total cost of revetment in ship canal	150,384
Grand total	279,334

In regard to right of way for the ship canal there is ample width for enlargement if such should be contemplated, as the grant or purchase specifies a uniform width on each side the center line of the canal ample for enlargement to a width of 300 feet at least.

In the Portage River the grants of land would be ample if the present line of improvement were to be followed, but if any straightening of the channel were contemplated it would probably require more purchases. Such land as would be required, though, would be only bog and marsh and of but little value.

Accompanying this report are sketches of portions of Portage River where land purchases were made by the Portage River Improvement Company, giving their location outlined with red lines.

No land survey marks near these locations could be found during this survey, even though inquiries were made of the old residents, and that Mr. Emerson, the county surveyor, spent one afternoon with us. As we had connected carefully with stakes set for the light-house reserve for the range lights, application was made to the office of light engineers at Detroit, Mich., and from such data as were furnished the section lines and locations were put on the map of this survey according to the trne meridian.

Very respectfully, your obedient servant,

G. A. MARR,
Assistant Engineer.

Maj. C. J. ALLEN,
Corps of Engineers, U. S. A.

THE PORTAGE LAKE AND RIVER IMPROVEMENT AND THE PORTAGE LAKE AND LAKE SUPERIOR SHIP-CANAL.

[Crossing the base of Keweenaw Point, in the county of Houghton, of the upper peninsula of Michigan, and connecting the waters of Lake Superior on the west with Keweenaw Bay (Lake Superior) on the east.]

In compliance with a resolution of the United States Senate, under date of April 22, 1884, "calling for a detailed report concerning the Portage Lake and Lake Superior Ship-Canal, the interest of the State of Michigan therein; the rights, title, &c., of the Portage Lake and River Improvement Company (so called) thereto, and the terms and conditions upon which it would be just and proper for the United States to procure and take possession of said canal and improvement for the purpose of making the same a free water-way for the use and benefit of navigation and commerce," the Secretary of War was directed to cause the necessary investigation to be made, and Lieut. Col. O. M. Poe, of the Corps of Engineers, was designated to make the same.

After a thorough and complete investigation by Colonel Poe upon all the points in connection therewith, and as directed by the Senate resolution, he reported in favor of and recommended that the Government should purchase this important water-way, thus rendering its navigation free to commerce.

Th ereport of the Secretary of War embodying the detailed report of Colonel Poe was transmitted to the Senate on or about January 5, 1885. (Ex. Doc. No. 15, Forty-eighth Congress, second session.)

The great importance of this water-way to the already vast and rapidly increasing traffic of the "Great Northwest," the natural outlet for which is through Lake Superior, being recognized by the various commercial bodies of the Western cities most familiar with the situation, resolutions requesting the Senators and Representatives in Congress from their respective States to use their best endeavors to secure such legislation as will result in the United States acquiring title to and ownership of the said canal and improvement, in accordance with the report of the Secretary of War, were passed by the Boards of Trade and Chambers of Commerce of Saint Paul, Minneapolis, and Duluth, Minn., Milwaukee, Wis., Chicago, Ill., Buffalo, N. Y., and Detroit, Mich. The legislatures of the States of Minnesota, Wisconsin, Illinois, and Michigan also passed concurrent resolutions of similar effect, and numerously signed petitions for the desired action have been forwarded to Congress from various cities throughout Minnesota, Wisconsin, Illinois, Michigan, Ohio, New York, Pennsylvania, Connecticut, Massachusetts, &c.

Attention is called to the following extract from the Portage Lake (Houghton) Mining Gazette of January 29, giving an idea of the imports and exports of Houghton County and vessel tonnage, on which tolls were collected during season of 1884, which show a business of some magnitude that is now subject to an unjust tax, which is a great burden on that section of the country, to say nothing of the fact that the limited draught of water through the canals restricts the business industries and increases the cost of transportation on all water shipments to and from that district:

PORTAGE LAKE'S SHIP-CANALS.

"In order to let those see who through ignorance are disposed to belittle the commercial importance of Portage Lake's two ship-canals, we invite their attention to

the following figures, which, although not official, are nearly correct, and represent the large items of business of the two highways during the season of 1884.

	Upper ship-canal.		Lower ship-canal.	
	Number.	Registered tons.	Number.	Registered tons.
Steamers (passed)	476	350,016	531	371,397
Vessels (passed)	53	15,362	231	85,836
Total	.....	365,378	.....	457,233

Increase over 1883, 52,993 tons.

Among the important items that passed in and out of the canals last year were—

	Tons.
Coal	85,000
General merchandise, &c	30,000
Refined copper	22,572
Mineral	8,625
Lumber (feet)	4,000,000

Had these canals been free of tolls and carrying the same depth of water as the Sault Canal, the tonnage passing through them last year would have been at least 30 per cent. greater than the figures show; as it was, the amount is nearly half that of the tonnage of the Sault Canal in 1883, which commands the entire commerce of Lake Superior."

Especial attention is also called to the statistics of the traffic to and from the Northwest, passing through the Saint Mary's Falls Canal, at Sault Ste. Marie, Mich., for season of navigation, 1884, as compared with the business done the preceding season (1883), shown by the following table, as taken from the special report of Col. O. M. Poe, dated January 8, 1885, to the War Department:

Comparative statement of the commerce through Saint Mary's Falls Canal, Michigan, for the seasons of 1883 *and* 1884.

Items.	1883.	1884.	Increase.	Percentage.	Decrease.	Percentage.
Vessels ..... number..	4,315	5,689	1,374	32	.....	.....
Lockages ..... do....	2,351	3,074	723	31	.....	.....
Tonnage, registered	2,042,259	2,997,837	955,578	47	.....	.....
Tonnage, freight	2,267,105	2,874,557	607,452	27	.....	.....
Passengers ..... number..	39,130	54,214	15,084	39	.....	.....
Coal ..... tons..	714,444	706,379	.....	.....	8,065	1
Builing stone ..... do....	5,405	6,047	3,642	151	.....	.....
Copper ..... do....	31,024	36,062	5,038	16	.....	.....
Flour ..... barrels..	687,031	1,248,143	561,112	86	.....	.....
Grain ..... bushels..	6,677,025	12,502,894	5,825,869	87	.....	.....
Iron ore ..... tons..	791,732	1,136,071	344,339	43	.....	.....
Lumber ..... feet, B. M..	87,131,000	122,389,000	35,258,000	40	.....	.....
Pig and manufactured iron .. tons..	109,910	72,428	.....	.....	37,482	66
Salt ..... barrels..	70,898	144,804	73,906	104	.....	.....
Silver ore ..... tons..	814	9,731	8,917	1,095	.....	.....
Unclassified freights ..... do...	191,571	207,173	15,602	8	.....	.....

Canal opened April 23 and closed December 10, 1884, being open to navigation 232 days. Canal was opened during season of 1883 224 days.

By this it will be seen that the increase in "registered (vessel) tonnage" was 47 per cent.; in "grain," 87 per cent.; in "flour," 86 per cent.; in "iron ore," 43 per cent.; in "copper," 16 per cent.; and in "lumber," 40 per cent. The increase in number of vessel passages was 32 per cent. The table shows a business already very large and that it is growing with remarkable rapidity, the total increase in tonnage being for 1884, 955,578 tons, "or nine times the average annual increase for the preceding fifteen years."

"Or, to state it with possibly greater force, this increase for 1884 is equal to the entire commerce through the canal during the first five years it was open to navigation."

The surprising growth of the Lake Superior business indicates the direction from which future increase must be expected, and the important factor the cereal products of the Northwest form therein. When it is taken into consideration that the great bulk of this immense traffic will be directly benefited by having this canal and improvement in hands of the Government, and put on same basis as the Sault Canal as to draught of water and free of tolls, the great importance of this desired action of Congress for the rapid and safer transit of these products, both to the producer and consumer, will be readily appreciated. It will be seen at once that this is an aid to the entire commerce of Lake Superior, and in no way can it be called a local or sectional improvement, as the interests to be benefited are those of the farmer, manufacturer, miner, transporter, and consumer, reaching through the "Great Northwest" the Western, Middle, and Eastern States.

If a map of Lake Superior is consulted, it will be seen that the Portage Lake canals are almost in a direct line as between White Fish Point, on the east, and Duluth on the west, and that the passage way across the base of Keweenaw Point will shorten the route through the lake about 125 miles east and west; and at the same time avoid the dangerous passage around the peninsula or "Keweenaw," which has very appropriately been called the "Cape Horn" of the Great Lakes. The navigation around this point is extremely hazardous, especially during the stormy months of the spring and fall, and the many wrecks strewn along this coast are speaking monuments of the great destruction of life and property in its vicinity in past seasons, and also of what may be expected in the future with the fast growing traffic, unless suitable and safe shelter for the lake marine is provided by the Government, for upon a coast of about 300 miles there is now no such shelter, the one or two natural harbors that exist being inaccessible except under the most favorable circumstances. The west, or Lake Superior, entrance to the canals forms a most desirable point for such a harbor of refuge, and which can be constructed at a comparatively small cost, but that it may be of greatest benefit to commerce the enlargement of the canals, giving greater depth of water, is a necessity to enable the largest class of vessels to make the passage available. The delays at and about this point are frequent and costly, as is demonstrated more forcibly each season as the number of vessels in the trade increases. As a fair illustration of this matter of "delay," the following letter which appeared in one of the Detroit newspapers is very appropriate to the point under consideration:

THE PORTAGE CANAL.

"*To the editor of the Evening News:*

Some ten or twelve years since, and before the Portage Lake Canal was completed, I was sent to Duluth, about the beginning of November, there to meet and take charge of a vessel loaded with very important supplies.

I remained there a week, in hourly expectation of her arrival. The weather was fine, and the reports I got by telegraph from Portage and Marquette were favorable.

The weather at all three points afforded no explanation of the detention.

Ultimately it was found that the steamer, after buffeting heavy weather for ten days, which prevailed around Keweenaw Point and did not extend 30 miles south of it, laid up in Copper Harbor.

This one trip could have contributed at least $2,000 to the purchase of the canal, if it had been successful.

Doubling Keweenaw Point takes a vessel nearly a degree farther north than passing through the canal; and if any of your readers will study a good map showing isothermal lines and consult some sailors who have navigated those waters, they will satisfy themselves that it is a place to be avoided, especially at certain seasons.

A weather station placed there would give some singular information, and I earnestly hope some day to see this done.

The advantage to coasting vessels engaged on the American shore would be incalculable.

The work should be managed as the "Sault" Canal is managed, and should be free to all comers.

I know not and care not what other parties or corporations are to be benefited, but most earnestly do I hope to see this important work under proper control and free from all exactions.

J. W. THOMSON.

PORT HURON, *January* 29."

"This same experience, to a greater or lesser extent, is what must be contended with every year, and in the aggregate amounts to the loss, in time alone, of many thousands of dollars.

In the interest of cheap transportation and of greater safety to life and property, this measure is one that should commend itself to all, and particularly to those who are to be directly benefited by the object sought.

No one can predict what the future trade of the Northwest will be. It is already vast and increasing with a rapidity that surprises the most sanguine, and all legitimate influence possible to afford better facilities for the speedy and safe transit of its products should be brought to bear on the Senators and Representatives of the different States in Congress. Upon a fair and full examination of this proposition that the Government shall acquire possession of the Portage Lake canals, it will readily be seen that this passage-way is a very important factor to the unrestricted navigation of our great water highways in its direct tendency to cheapen the cost of transportation, and should be thrown open to general public use on the same terms and conditions as are now in force on account of the Louisville and Portland, Saint Mary's Falls, and other canals, *i. e.*, free of tolls."

FEBRUARY, 1885.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 106.

STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL.

LETTER

FROM

THE ACTING SECRETARY OF WAR,

TRANSMITTING,

With accompanying maps and papers, a report by a Board of Engineers upon the expediency and desirability of the acquisition by the Government of the Sturgeon Bay and Lake Michigan Ship-Canal.

JANUARY 25, 1887.—Referred to the Committee on Rivers and Harbors and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 24, 1887.

The Acting Secretary of War has the honor to transmit to the House of Representatives, to comply with the requirements of the river and harbor act of August 5, 1886, a letter of the 14th instant from the Chief of Engineers, together with a copy of the report, and its accompanying maps and papers, from the special Board of Engineers appointed to examine in all their relations to commerce the Sturgeon Bay and Lake Michigan Ship-Canal, connecting the waters of Green Bay with Lake Michigan, with a view to making the same a free passage-way and harbor of refuge; to consider their value and all other matters connected with their usefulness to navigation, and to give information as to the expediency of the work and the desirability of their acquisition and improvement.

The report exhibits in detail the origin of the canal, the history of its construction, its cost, and its relation to commerce, together with the conclusions of the Board as to the expediency of the work and the desirability of its acquisition and improvement by the United States.

The views of the Board are concurred in by the Chief of Engineers and by this Department.

S. V. BENÉT,
Brig. Gen., Chief of Ordnance,
and Acting Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., January 14, 1887.

SIR: I have the honor to submit herewith a copy of the report, with accompanying papers and maps, received at this office from the special Board of Engineer Officers constituted by your orders to comply with the requirements of the following provisions of the river and harbor act of August 5, 1886:

The Secretary of War is authorized and directed to appoint a Board of three Engineers from the United States Army, whose duty it shall be to examine, in all their relations to commerce, the Sturgeon Bay and Lake Michigan Ship-Canal, connecting the waters of Green Bay with Lake Michigan, in the State of Wisconsin, with a view to making the same a free passage-way and harbor of refuge, to consider their value, and all other matters connected with their usefulness to navigation, and which shall give information as to the expediency of the work and the desirability of their acquisition and improvement. The said Board shall report to the Secretary of War, who shall lay its report before Congress at its next session, together with the views of himself and the Chief of Engineers of the United States Army thereon.

As the result of a most careful, thorough, and impartial investigation by the Board of all matters relating to the subject under consideration, this report exhibits, with much detail, the origin of the canal; the history of its construction and its cost, and also its relation to commerce, and finally concludes as follows:

(1) That if the barrier between Green Bay and Lake Michigan were now in its natural condition, the construction of a canal between them, on or near the line of the existing canal, would be a proper work to be done by the United States in the interests of commerce and navigation, but that the United States should not be made to become responsible for an insufficient canal encumbered with a heavy lien, results due to an inefficient agency not contemplated by the original act of Congress or recognized by any subsequent act.

(2) That the grant of land to the State of Wisconsin in 1866 was sufficient to have built the canal, and, should the United States assume control, no payment will be due equitably or legally for its construction and maintenance.

(3) That the existing depth of 13 feet in the canal is not adequate to the demands of the largest class of vessels on the great lakes, and therefore the canal, as it now exists, has only restricted importance.

(4) That the canal is not a harbor of refuge in any proper sense, and at best is only an approach to a sheltered bay which is capable of conversion into a harbor of refuge.

(5) That Sturgeon Bay is the true harbor of refuge, and to make it available as such, an ample basin should be excavated, the canal deepened, and works constructed in Lake Michigan exterior to the existing works of protection at the canal entrance.

(6) That the conversion of Sturgeon Bay into a harbor of refuge accessible through the Sturgeon Bay Canal to all vessels which navigate the Great Lakes would add great security to their shipping, and may be regarded as a public necessity.

(7) Whether the Government assumes control of the canal or not, the tolls collected on the vessels using it should not exceed the actual cost of operating and maintaining the said canal.

In submitting this report I beg leave to express my concurrence in the views of the Board.

Of the maps accompanying this report only one (Z 25) is herewith. Duplicate copies of the others remain on the files of this office for record and for inspection.

Very respectfully, your obedient servant,

J. C. DUANE,
Brig. Gen., Chief of Engineers.

Hon. WM. C. ENDICOTT,
Secretary of War.

LETTER OF LIEUTENANT-COLONEL WILLIAM P. CRAIGHILL, CORPS OF ENGINEERS, PRESIDING OFFICER OF THE BOARD OF ENGINEERS.

UNITED STATES ENGINEER OFFICE.
Baltimore, Md., December 3, 1886.

GENERAL: While, as the senior member, I send forward the unanimous detailed report of the Board on the subject of the Sturgeon Bay and Lake Michigan Canal, it seems not out of place to add a condensed statement of some of the circumstances of the case, with some suggestions. The two large bodies of water called Lake Michigan and Green Bay are separated by a strip of land about 75 miles in length and with an average width of 10 or 12 miles. Navigation between these bodies of water was originally maintained at the upper end of the bay.

About mid-length of the bay there was a deep indentation in the western side of this separating land, known as Sturgeon Bay. Its eastern end was distant from the western shore of Lake Michigan about 1½ miles.

The advantages that would result from making another communication at this place between the lake and the bay were soon perceived. These were claimed to be: A considerable shortening of distance for many vessels, with a proportionate gain in time; the avoidance of the dangers of the natural route, with a consequent saving of life and property; an increase in the value of Sturgeon Bay as a place of refuge by making it easily accessible from Lake Michigan as it already was from Green Bay.

In 1864 there was a corporation formed under the laws of the State of Wisconsin called "The Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company." Among its members were some of the leading capitalists of Chicago, Milwaukee, and Northeastern Wisconsin.

Lumbering was one of the most important things engaging the attention of the population of that section of country, and it is found, not unexpectedly or unreasonably, that the promoters of the canal scheme and the managers of the canal during its making and operation have been engaged in or connected with this special business of lumbering and the industries developed by it and supported by it.

In April, 1866, Congress granted 200,000 acres of land to the *State of Wisconsin* to aid in the construction of a "breakwater and harbor and ship-canal at the head of Sturgeon Bay to connect the waters of Green Bay with Lake Michigan."

The State did nothing with the land, but turned it over to this pre-existing company, which, after the lapse of several years of intermittent work, made the canal. It is now held by the company, and tolls are charged upon it.

A proposition was introduced in the Senate at its last session for the United States to take possession of the canal on the payment of $150,-

000. This proposition did not become a law, but Congress directed the organization of a Board of Engineers to consider and report upon the canal.

The conclusion of the Board is that if the barrier between Green Bay and the lake were now in its natural condition the construction of a canal between them, on or near the line of the existing canal, would be a proper work to be done by the United States in the interests of commerce and navigation; and if the United States now take it in charge, the Government should not become responsible for any existing lien upon it, and navigation upon it should be free.

The original law of Congress did not refer to the canal company in any way whatever. Section 5 imposed upon the State of Wisconsin the duty of causing "to be kept an accurate account of the sales and net proceeds of the land hereby granted and of all expenditures in the construction, repairs, and operating of said canal, and of the earnings thereof, and of returning a statement of the same annually to the Secretary of the Interior."

This was one of the important conditions of the grant, which has not been regarded.

Another condition of the grant was that the canal should be completed within three years from April, 1866. This time was afterwards extended to April 10, 1874, but the canal was not one-fourth done at the last date.

It may here be remarked that while section 5 of the law of 1866 contemplates the payment under certain circumstances of "legal interest on advances for the construction, repairs, and operating of said canal," it is understood that "legal interest" in Wisconsin is 7 per cent., and that compound interest is illegal. In this connection it should also be stated that the original amount advanced has been almost, if not altogether, refunded in the shape of tolls, and there is now in the treasury of the company from the same source some $10,000.

A fair construction of section 6 of the law of 1866 would seem to have required the canal to be 100 feet wide at bottom, whereas it was made 100 feet wide at the water-surface, or about 50 feet wide at bottom. This difference of dimensions greatly diminished the cost of the canal as well as its commercial usefulness.

The terms of the law of Wisconsin of 1868, especially section 4, would indicate it had the expectation that the proceeds of the land grant would suffice ($\frac{1}{4}$ by $\frac{1}{4}$) to cover the cost of making the canal. And it may here be specially noted that when the first fourth of the canal had been accepted as done, the company received more than the law was probably intended to give them. In addition to the grant of land Congress appropriated $180,000 for work contemplated in the original act of 1866 in which the grant was made, and executed a survey at a cost of several thousand dollars, the expense of which would otherwise have fallen upon the construction company.

It is claimed that the value of the grant was much lessened by the fire of 1871, but a fair offset to this is found in the notable increase in the price of lumber due to the demand for it after the great fire in Chicago.

Several questions suggest themselves for consideration.

Was it the intent of section 2 of the act of April 10, 1866, as to "the disposal" of "said lands" to have the State simply an intermediary between the United States and a corporation engaged in an operation apparently speculative, at least in part, when this corporation did nothing until it was vivified by a grant of United States lands?

Notwithstanding the decision of United States Court in a case quite similar, which has been followed by the Interior Department, is it not doubtful whether any sale of land *by the company* was justifiable, as the canal was not completed in the legal limit of time, and the conditional requirement of reversion of the lands was so explicitly provided for by a *special law?*

The legislature of the State has signally failed in executing one of the conditions of the grant as specified by section 5 of the act of April 10, 1866. It seems doubtful whether the State had the right to substitute a sub-agent for itself without the prior consent of the United States.

In addition to the alleged and admitted general advantages of the canal, its construction had also the effect, whether expected or intended or not, of placing in the hands of a corporation at the expense of the United States a valuable property, profitable to that corporation in facilitating and cheapening the transportation of the lumber used in their business, and a source of revenue from tolls collected from others.

Considering the law of Congress of 1866, and the law of Wisconsin of 1868, it is doubtful whether the collection of tolls *by the canal company* has been justifiable.

If the construction of the canal was a public work alone, for which a grant was made by the United States to the State at its solicitation, is not the State responsible for and to its own inefficient agent?

If the work was mainly private in its objects, should not the company which expected to profit by it be responsible for its own failure?

Is the United States properly responsible in any aspect of the case?

Very respectfully, your obedient servant,

WM. P. CRAIGHILL,
Lieut. Col. of Engineers.

The CHIEF OF ENGINEERS, U. S. A.

REPORT OF BOARD OF ENGINEERS.

NEW YORK CITY, *December* 3, 1886.

GENERAL: The Board of Engineers, constituted by Special Orders No. 112, Headquarters Corps of Engineers, United States Army, August 13, 1886, "to consider and report upon certain questions under act of Congress approved August 5, 1886, in connection with the Sturgeon Bay and Lake Michigan Ship-Canal, connecting the waters of Green Bay with Lake Michigan," and reconvened by Special Orders No. 137, Headquarters Corps of Engineers, United States Army, Washington, D. C., September 20, 1886, and by Special Orders No. 164, Headquarters Corps of Engineers, United States Army, Washington, D. C., November 1, 1886, has the honor to transmit herewith its report.

The copy of the extract from the act of Congress approved August 5, 1886, submitted for the guidance of the Board, reads:

> The Secretary of War is authorized and directed to appoint a Board of three Engineers from the United States Army, whose duty it shall be to examine, in all their relations to commerce, the Sturgeon Bay and Lake Michigan Ship Canal, connecting the waters of Green Bay with Lake Michigan, in the State of Wisconsin, with a view to making the same a free passage-way and harbor of refuge, to consider their value, and all other matters connected with their usefulness to navigation, and which shall give information as to the expediency of the work and the desirability of their acqui-

sition and improvement. The said Board shall report to the Secretary of War, who shall lay its report before Congress at its next session, together with the views of himself and the Chief of Engineers of the United States Army thereon,

and was accompanied by the following instructions from the Chief of Engineers, dated Washington, D. C., August 14, 1886:

It is desired that the Board avail itself of all attainable information upon the subject upon which it is required to report, and to this end it will visit the locality, hold public meetings, giving due notice thereof through the newspapers or otherwise as may appear best; invite discussion, orally or in writing; and, in short, use every effort to inform itself in regard to the origin of the work, the means provided for its construction and its cost; to the present and prospective value of the work under consideration to the interests of the commerce and navigation likely to be promoted by its acquisition and improvement by the Government, with the view of making the report full, complete, and exhaustive, and to this end every avenue of information should be pursued to its source.

The Board met at Milwaukee, Wis., September 10, 1886, and entered at once upon its duties by reading the order for its assembly, the act of Congress, and the special instructions prepared by the Department for its guidance, and the previous reports of officers upon the subject before it, and by examining the existing charts and plans of the canal and the estimates for the cost of construction. On the following day the Board visited Sturgeon Bay by crossing Green Bay from Menomonee, and made an inspection of the canal and works of Government improvements at the Lake Michigan terminus, returning September 12 to Milwaukee.

In order that all attainable facts might be placed before the Board, it was found necessary to call upon the authorities of the State for copies of all papers showing the proceedings of the State under the law of Congress making a donation of public lands to aid in constructing the canal; and upon the canal company, the agents of the State, for an official statement of its financial status; and also to collect data bearing upon the commerce of the canal and its relations to the navigation of the great system of lakes.

The engineer officer in local charge, Capt. C. E. L. B. Davis, Corps of Engineers, was also requested to make a survey of the canal to determine its present condition, which he promptly undertook and completed.

After arranging for the collection of this information and for the publication of an advertisement calling for a public meeting to be held in Milwaukee October 21, 1886, at which a free interchange of opinion might take place among mariners and others in regard to making the canal a "free passage-way and a harbor of refuge," the Board adjourned, to be reconvened at Milwaukee October 20, 1886.

The Board reassembled in Milwaukee on the day last mentioned, considered the papers and charts received and prepared during its recess, and heard oral testimony from some of the canal officials. The following day the public meeting was held in accordance with the advertisement, but the only persons who attended were the president, the treasurer, and the engineer of the canal company and the agent of the company for the sale of the lands donated for the construction of the canal.

The Board was unable to account for this indifference on the part of the public. In addition to the advertisement in the newspapers, several special letters of invitation were written to prominent persons, whose varied interests in the State would, it was supposed, naturally incline them to attend the meeting, if thus invited. Among these was the present member of the House of Representatives from the canal district.

His presence was specially desired, as he is one of the present stockholders, and was one of the original incorporators of the canal company who advanced money for starting the work of canal construction. (Exhibit C.) The letters were not answered, and none of the gentlemen attended the meeting.

The public advertisement specially called for written statements of the views of mariners and others whose interests would be subserved by the abolition of the canal tolls, and by the assumption of the control of the canal and its improvement by the General Government. No letters from any source were received by the Board, and no mariners, shipmasters, or ship-owners attended the meeting.

One inference to be drawn from this apparent indifference of the public is that the canal tolls are not oppressive.

For a full understanding of this report the Board believes it will be of interest—as also required by the instructions—to give an account of the origin of the canal, and a condensed history of past legislation in regard to its construction, and of the operations which have taken place thereunder.

ORIGIN OF CANAL.

For the information under this head, the Board is largely indebted to the reports of committees on State affairs, Wisconsin legislature, published in the journal of the assembly February 21, 1879, and reprinted in the Report of the Chief of Engineers, United States Army, 1879, Part II, page 1494, *et seq.*; to reports of engineer officers in charge of rivers and harbors, Lake Michigan and Green Bay, and their assistants, from 1870 to 1886 inclusive, and to personal inquiries by the members of the Board made since the present investigation was ordered.

Green Bay is an extensive inlet, tributary to Lake Michigan on the northwest side, from which it is partly separated on the east by a peninsula 75 miles long, approximately, having an average width of 10 to 12 miles. The bay is 100 miles long in a northeast and southwest direction, 60 miles of which (northern part) lie within the State of Michigan, and the residue in the State of Wisconsin. The width at the outlet is 30 miles, approximately, but the water-way there is choked by several islands, and by submerged reefs and shoals, the channels through which have been regarded by mariners as exceedingly dangerous to shipping, though the main channel to the northward of Washington Island is 2 miles wide between the 10 fathoms curves, and is free from obstructions. On the south side of the entrance, through the passage known as "Death's Door," many disasters have occurred in time past, owing to the strong and irregular currents which exist there. This is a favorite passage for vessels, because it shortens the sailing distance. Near the center of the bay, on the east side, there is an inlet, called Sturgeon Bay, which is 8 miles long east and west, and 2 miles wide at the entrance. The narrow strip of land, 1½ miles wide, separating the eastern extremity of Sturgeon Bay from Lake Michigan, is the site of the Sturgeon Bay and Lake Michigan Canal, the subject of this examination.

The feasibility of cutting a canal through this isthmus was recognized early in the history of the territory, but no active steps for its execution were taken till 1856, when a company was legally incorporated with authority to "locate and construct a canal, to construct a harbor at the mouth, and to dredge a convenient channel in the bay."

The financial embarrassments which swept the country in 1857, and the enactment of a new State law in 1858, imposing alleged oppressive

restrictions upon the company, caused it to pass out of existence before any work had been started. When the scheme was revived in 1864, it was claimed by the promoters that the building of the canal would materially diminish the annual losses to life and property, which vessels had previously suffered by shipwreck at Death's Door; that it would reduce the sailing distance 150 miles on each round trip between Green Bay and the southern part of Lake Michigan, and that the cost of transportation for lumber would be reduced 30 per cent. It was asserted that over 200 vessels of various classes navigated the bay, carrying a commerce consisting of lumber, shingles, laths, timber, in its various forms, commercial and mill supplies, and iron ore, having an estimated valuation of $100,000,000 annually.

The fine tracts of pine and hard-wood lands, which border the bay, and the rich and extensive iron mines, then opening on the Menomonee River and its tributaries, furnished the materials for the exports; and the supplies for the mills and the laborers, and the commercial necessities for the young town springing up at the mouths of the water courses furnished the imports.

Over 100 mills, employing 15,000 men, were in active operation, with an invested capital estimated at $100,000,000.

These were important industries, which could not fail to attract the attention of the public, and when Congress was petitioned to aid in constructing the canal the appeal was answered in 1866 by a liberal grant to the State of Wisconsin of 200,000 acres of public land, to be selected from available lands nearest to the site of the proposed canal.

The grant was believed at the time to be an especially valuable one; the greater part of the lands were located on the upper waters of the Oconto, Peshtigo, and Menomonee rivers, in Oconto and Marinette counties, Wisconsin, within 50 miles from the entrance to the canal, and over 100,000 acres contained some of the finest timber in the State.

From 60,000 to 80,000 acres of the grant, located chiefly in Door, Brown, and Kewaunee counties, were a poor grade of agricultural lands, with but little timber, and were rated as poor lands. As the finest tracts were located near the lake and its tributary streams, the timber readily found its way to the mills, where it was cheaply converted into salable articles of commerce, and thence distributed with facility and dispatch to the important trade centers at Milwaukee, Chicago, and elsewhere.

HISTORY OF THE CANAL CONSTRUCTION.

So far as concerns this inquiry, it will only be necessary to consider that part of the history of the canal scheme dating from the passage of the act of Congress approved April 10, 1866, which made to the State of Wisconsin a grant of public lands to aid in the construction of a canal to connect the waters of Sturgeon Bay and Lake Michigan.

The act is as follows:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and hereby is, granted to the State of Wisconsin, for the purpose of aiding said State in constructing and completing a breakwater and harbor and ship-canal to connect the waters of Green Bay with the waters of Lake Michigan, 200,000 acres of public lands, to be selected in subdivisions, agreeably to the United States survey, by an agent or agents appointed by the Governor of said State, subject to the approval of the Secretary of the Interior, from lands subject to private entry: *Provided*, That said selections shall all be made from alternate and odd-numbered sections of land nearest the location of said harbor and canal in said State not otherwise appropriated, and not from lands designated by the United States

as "mineral" before the passage of this act, nor from lands to which the rights of pre-emption or homestead have attached.

SEC. 2. *And be it further enacted*, That the said lands hereby granted shall be subject to the disposal of the legislature of said State, or, if the legislature thereof shall not be in session or shall adjourn within ten days after the passage and approval of this act, then said lands shall be subject to the disposal of the Governor and Board of Commissioners * of school, university, and swamp lands of said State, for the purpose aforesaid, and for no other; and the said canal shall be and remain a public highway for the use of the Government of the United States, free from toll or charge upon the vessels employed by said Government in the transportation of any property or troops of the United States.

SEC. 3. *And be it further enacted*, That before it shall be competent for said State to dispose of any of said lands, to be selected as aforesaid, the plan of said breakwater and harbor and the route of said canal shall be established, and a plat of plats thereof shall be filed in the office of the War Department, and a duplicate thereof filed in the office of the Commissioner of the General Land Office.

SEC. 4. *And be it further enacted*, That if the said breakwater, harbor, and canal shall not be completed within three years from the passage of this act, the lands hereby granted and remaining unsold shall revert to the United States.

SEC. 5. *And be it further enactad*, That the legislature of said State shall cause to be kept an accurate account of the sales and net proceeds of the lands hereby granted, and of all expenditures in the construction, repairs, and operating of said canal, and of the earnings thereof, and shall return a statement of the same annually to the Secretary of the Interior. And whenever said State shall be fully reimbursed for all advances made for the construction, repairs, and operating of said canal, with legal interest on all advances until the reimbursement of the same, or upon payment by the United States of any balance of such advances over such receipts from said lands and canal, with such interest, the said State shall be allowed to tax for the use of said canal only such tolls as shall be sufficient to pay all necessary expenses for the care, charge, and repair of the same.

SEC. 6. *And be it further enacted*, That said ship-canal shall be at least 100 feet in width, with a depth of water not less than 13 feet.

Approved April 10, 1866.

By a State act published March 10, 1868, nearly two years later than the act of Congress, this grant with all the restrictions, and upon the terms and conditions contained in said act of Congress, was accepted by the State of Wisconsin, and transferred subject to the conditions, restrictions, and obligations of the act of Congress, to a construction company, called the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, which was organized, as the act says, in the city of Milwaukee, on the 4th day of October, 1866, in accordance with the State law of 1864. (Exhibit D.)

The State act of 1868 is as follows:

The people of the State of Wisconsin, represented in senate and assembly, do enact as follows:

SECTION 1. That the lands, franchises, rights, powers, and privileges granted to and conferred upon the State of Wisconsin by an act of Congress approved April 10, 1866, "granting to the State of Wisconsin a donation of public lands to aid in the construction of a breakwater, and harbor, and ship-canal at the head of Sturgeon Bay, in the County of Door, in said State, to connect the waters of Green Bay with Lake Michigan, in said State," be, and the same are hereby, accepted with the restrictions, and upon the terms and conditions contained in said act of Congress.

SEC. 2. For the purpose (of) carrying out the objects of said act the said lands are hereby granted and conferred upon the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, a company organized in the city of Milwaukee, on the 4th day of October, 1866, under and by virtue of chapter 365 of the laws of Wisconsin of 1864, approved April 24, 1864, subject to all the conditions, restrictions, and obligations herein mentioned

SEC. 3. It thall be the duty of said ship-canal company to appoint an engineer who shall proceed to survey, lay out, and establish the route of said canal, and determine the termination thereof, and also prepare a plan for the construction of said canal in conformity with the provisions of the said act of Congress, and make a diagram

* The Board of Commissioners for the sale of school, university, and swamp lands was composed by State law of the Secretary of State, the Treasurer, and the Attorney-General.

thereof, to be approved by the Governor, and when approved by him the same shall be filed in the office of the Secretary of State.

SEC. 4. It shall be the duty of the said company, after having made and filed such survey and plan of said canal, to proceed without unnecessary delay and construct the same in conformity therewith: *Provided*, That as the work on said canal progresses, the company may notify the Governor that one-fourth or one-half or three-fourths of said work has been done, respectively, when upon receiving such notification, the Governor shall appoint an agent to inspect the same, and if said Governor is satisfied that so much of said work has been done in accordance with the requirements of this act and of the act of Congress aforesaid, then the said Governor shall certify the same to said company and deposit a copy thereof in the office of the Secretary of State, and in said certificate shall determine the proportion of said lands the said company has become entitled to in consideration of said work so done and approved by said Governor, and when the Governor shall make and file such certificate the Commissioners of Schools and university lands shall convey by patent to the said company said proportions of said lands, respectively, as selected by said company, and said company may proceed to sell and convey the same; and when the said company shall have completed the said canal in pursuance of the act of Congress and in conformity with said survey and plan it shall be the duty of the company's engineer to certify the same to the Governor, whereupon it shall be the duty of the Governor to inspect the said work in person or to appoint one or more agents to inspect the same and determine whether the said canal is constructed as required by this act. And whenever the said Governor shall determine that the said canal has been constructed by the said company as required by said act of Congress, and in conformity with the plan aforesaid, he shall certify the same to said company and deposit a copy thereof in the office of the Secretary of State, and which certificate, as well as any certified copy thereof or of any other certificates mentioned in this act under the seal of the State, shall be evidence of the facts therein set forth. And when the Governor shall make and file with the Secretary of State such certificate and deliver a copy of the same to the said company, the remainder of the said lands shall be patented by the Commissioners of school and university lands to the said company, which shall stand seized and possessed of all said lands as fully as the State can convey the same, and free from any tax for the term of ten years, if so long held by the said company, and the said company shall use all due diligence in disposing of said lands at a fair and equitable price, and they shall not be held by the said company for speculation, and when sold by said company they shall be subject to taxation; *Provided*, That previous to the issue of a patent therefor or for any of said lands said company shall reimburse the State for all expenses incurred on account of the same.

SEC. 5. All expenses incurred under and by virtue of this act, and of the act of Congress aforesaid, shall be paid by the company, and the State shall not in anywise be holden therefor.

SEC. 6. This act shall take effect and be in force from and after its passage.

Approved March 5, 1868.

The canal company was incorporated, it is said, to comply with section 10, Article 8, of the constitution of the State of Wisconsin, which reads as follows:

> The State shall never contract any debt for works of internal improvement, or be a party in carrying on such works, but whenever grants of land or other property shall have been made to the State, especially dedicated by the grant to particular works of internal improvement, the State may carry on such particular works, and shall devote thereto the avails of such grants, and may pledge or appropriate the revenues derived from such works in aid of their completion.

It was decided, on January 4, 1860 (10 Wis., 195), in the case of Bushnell *vs.* Beloit, under this section, that—

> The State legislation may authorize that to be done by another which the State cannot itself do by reason of a prohibition in the constitution. This principle is based upon the unrestricted power in the legislature to create corporations or allow individuals to do acts inhibited to the State to engage in.

By the acceptance of the grant of public land from the Government for the specific purpose of aiding in the construction of the proposed canal and breakwater, the State of Wisconsin accepted a trust, as the Board believes, which it was under obligation to see faithfully executed in furtherance of the particular work mentioned in the grant. And it does not appear that there is anything in its constitution or laws to have

prevented the State from accepting the lands, selling them according to State laws, and applying the proceeds of the sale to the construction of the canal, though it may have been more convenient to incorporate a special company to relieve the State from the trouble and care incident to such an enterprise.

The first paragraph of section 2 and the last paragraph of section 5, act of Congress, April 10, 1866, seem to indicate that Congress expected that the State would assume the duty of selling the lands, and apply the proceeds in the execution of the work.

The question here arises whether the canal company, on its incorporation, became simply the agent of the State, and when its work was completed, naturally passed out of existence, and the canal improvements should not have become the property of the State, with such incumbrance attached as the construction properly entailed.

If the company had not been reimbursed for its legitimate outlays, at the time of completion of the canal, it was the duty of the State to audit the accounts, inclusive of the sales of the lands granted for construction, and to make an equitable adjustment with the company.

The act of Congress, April 10, 1866, required the canal to be constructed within three years from the passage of the act, otherwise the lands so granted would revert to the public domain. On the expiration of this limit, April 10, 1869, no work of construction of any kind had been done by the canal company.

On the 1st of March, 1872, the United States grant was revived, and its provisions were extended by Congress to April 10, 1874, and in accordance therewith work was begun July 9, 1872; but on the expiration of the limit of the extended grant, the first quarter of the canal had not been completed, nor had any patent for any portion of the land been issued. The canal company suspended operations from 1874 to 1877; in the latter year work was resumed, and prosecuted to completion in November, 1881. The certificate of the Governor on the completion of the canal, was dated December 5, 1881, or seven years and eight months after the expiration of the time as extended by Congressional act, and fifteen years and eight months after the passage of the original act of Congress, April 10, 1866.

The lands constituting the Government grant were patented to the canal company by the State authorities in four sections, one section at a time, on acceptance by the State of each one-fourth completed section of the canal.

The canal, when declared completed by the State, December 5, 1881, was 7,400 feet long, 100 feet wide at the water's surface, and from 11 to 13 feet deep, estimated from the plane of low water of 1847. The 3,200 feet adjacent to Lake Michigan were revetted, on both sides, with sheet-piling; the next 900 feet to the westward were protected on both sides with brush and a few piles, and the remaining 3,300 feet adjacent to Sturgeon Bay were left without any kind of protection.

From the western end of the canal, for a distance of 6,100 feet into Sturgeon Bay, a channel had been excavated of a width and depth equal to that in the canal; and in Lake Michigan, north and south of the canal entrance, the shore-line had been protected by a few hundred feet of timber-work, filled with stone, to prevent deterioration of the canal entrance.

The canal company did no work towards the construction of the "breakwater and harbor" mentioned in the original act of Congress making a donation of public lands by which the canal construction was executed. All the improvements in Lake Michigan at the canal en-

trance, except a small amount of dredging by the canal company, to secure 13 feet depth on the approach to the canal, was done by the Government. These governmental improvements were begun in 1873, under an act approved March 3, 1873, which appropriated $40,000 for a "harbor of refuge at Lake Michigan entrance to the canal." This act and those passed subsequently have relieved the State of Wisconsin of the obligation imposed by the original act of building "the breakwater and harbor" in Lake Michigan. The estimated cost of the so-called harbor of refuge was $180,000, of which sum $160,000 have been appropriated and expended to date.

So far as built, the works constituting the protection to this canal entrance consist of two oblique piers of pile-work, filled with stone, starting from the shore-line 350 feet north and south of the entrance, and converging towards each other at a distance outwards of 1,100 feet, so as to leave an opening between their outer ends of 235 feet in the clear. The space inclosed by the piers measures about 14 acres, and has been dredged by the Government to afford 12 to 13 feet at low water. The harbor of refuge, so called, is a harbor in name only, but *does* serve to protect the canal entrance. When the seas are rough vessels cannot anchor there, and must pass through the canal to a harbor of refuge in Sturgeon Bay. The narrow width of the canal forbids its use at such times for the accommodation of vessels. All must go inside.

To provide in Lake Michigan a secure entrance to the canal and passage thence to Sturgeon Bay, works must be built (and channel excavated to 18 feet depth) exterior to existing works, at a probable cost of $700,000 to $1,000,000.

The nature and location of such works have not been studied in detail for want of the information to be derived from further surveys and observations.

The above sum is so large that it seems proper to state it in this connection for the information of Congress when considering the expediency of the Government's assuming control of the canal and its future improvement.

An examination, section by section, of the original act of Congress approved April 10, 1866, will show how the State of Wisconsin has performed its trust toward the Government, and how the canal company has carried out its obligation to the State.

Section 1.—A land map, containing the location of the selected lands, was presented for the examination of the Board by the canal company, which indicated that all the lands lay within a circle having its center at canal entrance on Sturgeon Bay, and described with a radius of 50 miles. Some of the lands were noted in isolated quarter-sections, while others were in large bodies, more or less widely separated. It would have been impracticable now to test the accuracy of the selections.

Section 2.—The action taken by the State of Wisconsin on the act of Congress April 10, 1866, was delayed for nearly two years after the passage of the act, and was then legislative. The provisions of this section appear to have been complied with.

Section 3.—This section was only partially complied with. On May 2, 1867, a map showing "route of said canal and the plans of the breakwater and harbor" was filed, with letter from the Governor, April 29, 1867, in the office of the Commissioner of the General Land Office. On March 10, 1873, a second map, in lieu of the one approved and filed in 1867, was filed, showing "the plans of the piers for the harbor and the route of the canal" (Exhibit X, Map A). The first map filed gave drawings and specifications for a canal 100 feet wide at the bottom, with re-

vetted banks throughout, and a harbor in Lake Michigan, while the second map showed only the route of the proposed canal and a new form of protection at canal entrance, and omitted to give any details of construction (Exhibit X, Map B).

Section 4.—It has already been stated how this section has been ignored. Notwithstanding the act of Congress required the canal to be completed within three years after the passage of the act under penalty of a reversion to the United States of the lands unsold, the canal company did not commence operations till six years thereafter. In the mean while, however, the limit of completion had been extended by Congress to April 10, 1874. When this last date was reached the canal company had not completed one-fourth of the construction, and therefore had not become entitled to any land under the State act of acceptance of the grant, and no patent had been issued.

Congress passed no subsequent law extending the grant, though a memorial (Exhibit I), dated February 6, 1877, was sent to Congress by the legislature of the State of Wisconsin, asking for an extension of three years, and for an appropriation of $100,000 in money.

This memorial says that,

> Owing to the depreciation of said grant in consequence of the destructive fire of 1871, which destroyed much of the timber thereon, * * * * the company has been unable to raise means to prosecute the work.

Attention is invited to the fact that the appraisal of the grant by a commission, of which the president of the canal company was a member, was made in August, 1874, three years after the said fire (Exhibit F.)

It is now stated by the canal company, that no further effort was made for the extension of the land-grant act, as the Circuit Court of Minnesota had decided in the case of Saint Croix Railroad grant (Dillon's C. C. Rep. Dist. Minn. 1872, p. 398), that—

> Such lands do not, *ipso facto*, revert to the United States by mere failure to build the road (railroad grant) within the period prescribed in the act of Congress; to effect the forfeiture, some act on the part of the General Government evincing an intention to take advantage of such failure is essential.

Here arises a question of law which the Board does not feel competent to decide upon, and therefore limits itself to a simple statement of the facts.

Section 5.—This section was not complied with (Exhibit A). From the very nature of the grant of land which was made to aid in the construction of the canal, the payment of money by the Government, on assuming charge of the canal, to the State in reimbursement with legal interest for alleged advances by the State in excess of net receipts from land sales, presupposes that the State has carefully audited the accounts for sales of lands and for construction, and approved them as well as the methods pursued by the canal company in either particular. The State did not, in fact, audit any account either of construction or sale of land.

This subject will be further considered under the head of "cost of construction."

Section 6.—This section was not complied with, for its provisions require that the said ship-canal should be 100 feet wide, and not less than 13 feet deep. The phraseology of the section might, on first reading, appear somewhat vague, but the obscurity disappears when it is carefully examined with reference to the requirements of a navigable width for a ship-canal.

The interpretation given to it by Maj. D. C. Houston, Corps of Engineers, (Report Chief of Engineers, 1872, page 171) namely, that the required width should be measured on the *canal bottom* should be kept

in mind when considering the State decision which defined the dimensions for the canal.

The river and harbor act approved March 3, 1871, contained provision for a

> Survey for a ship-canal from the head of Sturgeon Bay, Wisconsin, on the line now opened across the Portage through the timber to the shore of Lake Michigan, with estimates for constructing the same 100 feet wide and 13 feet deep.

It will be observed that this act was passed over one year before the Sturgeon Bay and Lake Michigan Canal Company began work under the State act of 1868 accepting the Government land grant. It is not known under what influences the direction of this survey to be made by the United States was incorporated in the law, but the effect was to relieve the canal company of the expenses of a detailed survey, the preparation of the necessary charts, and the formation of the estimates for the cost of the canal construction. The survey was made during the summer of 1871, under the direction of Major Houston, Corps of Engineers, who says in his report (Report Chief of Engineers, 1872, page 171), that "the proposed canal, for which estimates are submitted, is 100 feet wide *at the bottom*, and 13 feet deep."

The language of the act of April 10, 1866, is identical with that of March 3, 1871, in regard to the dimensions of the canal, and Major Houston interprets the language, referring to width, to mean 100 feet wide at the bottom. No exception seems to have been taken to this interpretation by any one in authority.

The line of the canal route recommended by Major Houston was practically adopted by the State, but the majority of the committee on State affairs, Wisconsin legislature, under date February 21, 1879 (Report Chief of Engineers, 1879, Part II, page 1496, Exhibit H), report that the canal company did not adopt the Government plans and specifications, but others which provided for a canal 100 feet wide *at the water's surface* and 13 feet deep. The reason given for this change was that the State had been disappointed in securing an additional land grant from the Government.

The change was therefore dictated by economy, at the expense of canal efficiency. The canal as eventually completed was neither 100 feet wide at the bottom nor 13 feet deep throughout.

The canal company was not in ignorance of the Government plans and specifications, for its chief engineer, who had charge of all the work done on the canal from the beginning to the end, was Mr. William T. Casgrain, who had made in 1871, under the direction of Maj. D. C. Houston, the first detailed survey across the isthmus, by which was determined the most feasible route for the canal, and had prepared the estimates for the cost of construction.

COST OF THE CANAL CONSTRUCTION.

The Sturgeon Bay Canal is an open cut, without locks or gates, and the unstable banks are revetted for only a part of the canal length. The canal company has no visible property there except the canal itself. The original acts of the State of Wisconsin, March 10, 1868, and succeeding acts on the same subject, constituted, and in effect recognized, a contract with the canal company to do for the State a certain specified work for the consideration mentioned in the original act, viz, the grant of 200,000 acres of public lands.

The cost of the canal construction was made the subject of an examination by a Board of Engineers, constituted by Special Order No. 51,

Headquarters Corps of Engineers, Washington, D. C., June 6, 1882, in obedience to a resolution of the Senate of the United States, March 9, 1882. We respectfully invite attention to the report of that Board, with its accompanying papers (Report of Chief of Engineers, 1883, Part II, page 1657, Exhibit A).

It is learned therefrom, on the statement of the Governor, that the legislature of the State of Wisconsin had failed to comply with section 5 of act of Congress of 1866 which required that the said "legislature should cause to be kept an accurate account of the sales and net proceeds of the lands" granted by the said act, and of "all the expenditures in the construction, repairs, and operating of said canal, and of the earnings thereof, and shall return a statement of the same annually to the Secretary of the Interior."

The details of the sale of the lands and the construction of the canal were imposed entirely upon the Sturgeon Bay Canal Company, and they alone possessed the records relating to the net proceeds of the lands and the cost of construction of the canal.

The information which the present Board has received in regard to the canal excavations has been derived from written statements from the canal company. Independent computations have also been based on the original survey of 1871 and on two subsequent surveys, one made by direction of the Board of United States Engineers in 1882, and the other under the direction of this Board in September 1886.

The low-water reference for the year 1847 was adopted in the preparation of the charts of the three surveys, so that the computations for the excavations required along the line of the canal and in the bay could be easily made for comparison.

The following are the results obtained:

For a canal 100 feet wide *at bottom* and 13 feet deep affording approaches of equal width and depth from bay and lake:

	Cubic yards.
1871. Survey by Maj. D. C. Houston, Corps of Engineers. Excavation, wet and dry, *in situ*	895,000
1882. Survey by Maj. H. M. Robert, Corps of Engineers. Excavation, wet and dry, *in situ*	1,039,000
1886. Survey by Capt. C. E. L. B. Davis, Corps of Engineers. Excavation, wet and dry, *in situ* (Exhibit Q)	1,064,441

The canal company claims that in excavating a canal 100 feet wide *at the water surface* and 13 feet deep the excavation equaled 1,147,624 cubic yards.

It is here noted that the number of cubic yards paid for by the company exceeds the amount of the estimates for the work, and in this connection several circumstances are to be mentioned. The canal as excavated was smallar than as estimated for. The official inspector, Mr. Nader, reported to the Governor of Wisconsin (Exhibit P) that in one portion of the work the excavation was not well managed. The great fire in Chicago destroyed most of the Government records, and some of the estimates are prepared from incomplete data. These attempts at explanation of discrepancies are made in fairness to all concerned.

The written certified statement furnished by the canal company (Exhibit A) shows that the disbursements, which might have been legitimately charged against continuous canal construction account to October 10, 1882, were $342,762.99; but this amount includes $36,510.61 for overseeing and incidental expenses, chief engineer, from May 5, 1872, to December 3, 1881, calculated without rebate for the three years, 1874–1877, during which work was suspended, when in the opinion of the Board all expenses should have been stopped. The means pro-

vided for the work amounted to $406,335.51, including the net proceeds arising from the sale of the Government land grant, amounting, by the company's statement (Exhibit A), to $344,687.17 (after deducting the expenses of the land department, $33,278.05); the insignificant subscription to the capital stock of the canal company amounting to $2,665, and the sum of $58,983.34 temporarily loaned, 1872 and 1873, by the stockholders to the company.

The company borrowed in 1876 from the Third National Bank, New York City, $41,500, but this sum was repaid, with interest, August 22, 1878, out of sales from lands, and should not enter the expense account.

The year 1874 was the critical period in the experience of the company; it had received in September a patent for 32,347 acres of fine timber land, but the financial disturbances throughout the country gave a poor demand for it, and it was found impracticable, owing to the stringency of the money market, to raise money by mortgages. The result was that the company suspended work till 1877, during which year sales were made, after public advertisement, by auction or otherwise, and the sum of $95,922.67 was realized, including $4,977.51 from trespasses upon land grant. The company was thus enabled to liquidate all outstanding liabilities and to resume work under favorable auspices.

The sales of the succeeding land patents, notwithstanding the low prices at which the last 70,000 acres were disposed of, made ample provision for carrying the work to completion without the necessity for further loans from the stockholders.

In the company's account (Exhibit A) it will be noticed that these loans, which aggregated $58,983.34, were capitalized into stock at par September 10, 1873, and 10 per cent. compound interest computed thereon to December 1, 1882, by which the original sum of $58,983.34 was swollen to $140,383.58.

The time actually consumed in work was about six years, but it was not continuous, and the methods pursued made the expenses unnecessarily large. The work was done at irregular intervals during nine years or more with the evident determination of the canal company that the proceeds from the sales of the land grant should provide the working capital, and that assessments upon the stockholders should be made only when such advances became absolutely essential to hasten to completion an additional one-fourth part of the canal excavation for the procurement of an additional patent of land.

This method of doing work involved a hasty and injudicious sale of the land; it relieved the company from using the private money of the stockholders, but at the same time reduced its ultimate assets, and besides prolonging the work gave rise to unnecessary expenditures for salaries, office expenses, &c.

The long delay in constructing the canal, and the apparent indifference of the public to the matter at the present time, lead the Board to think that the importances of this port to the *general* commercial interests of that section have not been as great as have been sometimes represented, and that there was a speculative interest in the land grant which had no connection with commerce.

The land was sold by the canal company. Before any sales were made the land was appraised by intelligent commissioners, one of whom is now president of the company. The amount of the appraisal was nearly $600,000. The net proceeds of sales were less than $350,000. Whether a greater sum would have been realized had the lands been sold directly by the United States or by the State of Wisconsin can not be known. It is believed, however, that it would have been very much better had

that method of sale been adopted and nothi g done on the work upon the canal until a sufficient sum should thus have been obtained for beginning and probably completing the canal; and there would have been no such lien on the canal as is now presented, which consists of advances by members of the company, with interest heavily compounded thereon.

The first two patents of land issued to the company called for 100,000 acres, or one-half the grant, at an appraised valuation of $341,905.46, the residue of the grant being appraised at $235,677.98. The lands were not of equal value, and were grouped into four classes, the value per acre of land in each class being appraised at $4.50, $3.50, $2.50, and $1.50, respectively, and each patent issued was made up of a certain proportion of land selected by the canal company from each class (Exhibit F).

The committee appointed by the State legislature in 1876 to investigate the subject of land selections reported (Exhibit G) that the "first and second classes were appraised too low, and the third and fourth classes too high," and that the grant was "ample to complete the work." However this may be, the company seems to have selected first the lands which would have the readiest sale, and the first three patents contained, it is believed, all the lands which were of special value.

The canal construction and maintenance account should stand as follows (Exhibits A and B):

RECEIPTS.

Net receipts from lands (Exhibit A) October 10, 1872	$344,687 17
Net receipts from lands (Exhibit A) October 10, 1872, to October 1, 1886	1,193 61
Canal tolls, January 1, 1882, to October 10, 1882	14,016 76
Canal tolls, October 10, 1882, to October 1, 1886 (Exhibit B)	73,343 41
Total	433,240 95

DISBURSEMENTS.

For construction to October 10, 1872 (Exhibit A)	$342,762 99
Canal operating expenses to September 1, 1882 (Exhibit A)	8,542 30
Canal operating expenses from September 1, 1882, to October, 1886, repairs, land department, and salaries, &c. (Exhibit B)	26,432 24
Total	377,737 53
Net receipts in excess of legitimate disbursements	55,503 42

After the acceptance by the State of the land grant, and during the process of construction of the canal, the Government of the United States expended $3,589.46 in making a survey and estimates for canal construction, and $160,000 in building, on Lake Michigan, works for the protection of the canal entrance, and has appropriated $20,000 more for the same object.

These obligations were imposed upon the State by the original act donating the land, and their subsequent assumption by the Government may be regarded as additional bounties to the State.

There are no returns for tolls collected during the years 1879, 1880, 1881, before the canal was turned over to the State, but the records (Exhibit W) show that 547,852 tons passed through during those years, which, at 3 cents per ton, the lowest rates, would give $16,435.56, exclusive of towage. The net proceeds from canal tolls and towage from January 1, 1882, to October 1, 1886 (Exhibit B), were $87,360.17, and the disbursements for operating and repairs were $30,438.43, leaving a credit balance on this account, for the years 1882, 1886, of $56,921.74.

During the years 1882–1886, the sum of $64,149.20 was paid to the stockholders of the canal company (oral statement of treasurer of canal company), in reimbursement for the loans made in 1872–1873, to the company to enable it to complete the first quarter of the canal construction. The balance to the credit of the canal company October 1, 1886, was $10,712.99, including $6,156.36 cash in bank (Exhibit B).

The Board agrees with the Board of 1882 (Report Chief Engineers, 1883, Part III, page 1661) in saying that the object of section 5 of act of Congress April 10, 1866, could be entirely defeated if salaries for the various officers of the Sturgeon Bay Canal Company could be charged as an essential part of the expense of the State for the "construction, repairs, and operating of said canal."

As the United States, by going beyond the original intent of the grant (which if well managed might have sufficed to complete the canal), constructed an entrance to the canal at a cost of more than $160,000, thereby making the property a more valuable one than it otherwise would have been, except through an equal outlay by the company, is not the United States then entitled to an equitable proportion of the annual proceeds of the use of the canal? And should not this outlay be a fair offset to the claim of the company to reimbursement to the extent of $150,000 as proposed in the Senate of the United States at its last session, especially as this large sum has been mainly piled up by illegal compound interest, and the real cash advances have been nearly already reimbursed?

COMMERCIAL CHARACTER OF CANAL.

There is a narrow channel through the canal, as constructed, which has a depth of nearly 13 feet, low-water stage 1847, which is equal to the depth sought to be obtained at the principal improved harbors on Green Bay, but is 3 feet less than that which commerce requires for the large ports on the great lakes. The tonnage which has heretofore passed through the canal is believed to have been almost exclusively by vessels, barges, and tows employed in transporting the products of the mills located on Green Bay, or the supplies necessary for their maintenance, and those for the population dependent upon the lumber interest.

It would be interesting to separate the tolls into two sums; one consisting of the amounts paid by vessels belonging to or in the service of persons connecting with the canal company; and the other of the amounts paid by vessels using the canal because of its advantages, in time and convenience, and sometimes in safety, over the old longer way between Green Bay and Lake Michigan. This could only be done by a careful analysis of the information supposed to be contained in the toll-records of the company, which the Board has not.

Since the yield of timber on Green Bay has diminished, and the mills have begun to locate their pile yards near the points of manufacture for the shipment of their products direct by rail to the points of demand, the tonnage for this class of exports has decreased, and the advantages of the canal to the mill companies have proportionately declined. It is therefore not a matter of surprise that the time has come when the subject of transferring the canal to the Government, for maintenance and repair, should be agitated.

In the near future some disbursements for repairs and dredging may be expected for which present or increased tolls may be inadequate, and would call for advances from the canal company—if the control remains vested in it—and those it would probably be unwilling to meet.

The result would be a lessening of the value of the canal and of the benefits arising from its construction. The extensive country rich in minerals, tributary to Green Bay on the north and northwest, and that which may be made tributary to it by the completion of the projected Fox and Wisconsin Canal and River Improvement (now nearly finished westward to Montello, Wis., only, with 6 feet water, distant 131 miles from Green Bay), will always make of Green Bay an important commercial highway, and of the Sturgeon Bay Canal a valuable line of intercommunication with Lake Michigan, which should be as free to shipping as any of the channel-ways connecting the Great Lakes.

The Board is fully sensible of the advantages, present and prospective, of the Sturgeon Bay Canal, but it cannot omit saying that without extensive improvements to it and at its outlet into Lake Michigan, already alluded to, it will never be utilized in a great degree as a harbor of refuge. Admitting that it could be entered by vessels of 13 feet draft or less in a storm without any additional improvements—which would be very hazardous—the capacity of the canal is too restricted to allow vessels to anchor or tie up in it; they must all go into Sturgeon Bay for shelter.

While the canal is not a harbor of refuge, it is a means of access to such a harbor in Sturgeon Bay. In this aspect its utility depends upon the ease and facility with which vessels can enter it.

Sturgeon Bay is a harbor of refuge of rare and exceptional value, but is of chief advantage to the vessels belonging in Green Bay, whose sailing courses always find them, on the gathering of a storm, close inshore, accessible to the canal entrance.

A harbor of refuge for vessels navigating Lake Michigan, and passing to the other larger lakes, is needed on the west side of Lake Michigan, between Porte des Morts and Milwaukee; and the construction of extensive works, exterior to those now at the entrance to Sturgeon Bay Canal, the enlargement of the canal, and the excavation of a convenient basin, would convert Sturgeon Bay into a secure place of shelter for the largest vessels of the lakes, whose benefits would be enjoyed at one time or other by the greater part of all the shipping which ever comes to Lake Michigan.

The data for giving a close estimate of the cost of the work herein outlined are incomplete and imperfect, and the Board only alludes to these accessory improvements as one of the probabilities of the future, which may follow the assumption of the control of the canal by the Government.

The tonnage of the canal gradually increased (Exhibit W) from 32,071 tons in 1879 to 745,000 tons in 1882, and then in turn declined gradually till it became 376,605 tons for 1886, returns estimated to October 1. It is not probable that the present tonnage will be much changed during the next few years, as the decline in the lumber tonnage will be doubtless compensated for by that due to the gradual increase in the population of the tributary districts, and in the extension of the manufacturing and mining industries.

It would be advisable, in view of the growing need of a harbor of refuge on the west side of Lake Michigan, for the Government to assume full and complete control over the canal, its future improvement and maintenance, provided the United States may be guaranteed freedom from all liability for any expenses incurred by the State of Wisconsin, or by the canal company, in the construction of the canal, as it exists to-day, whether represented by capital stock, or any other kind of lien. If any legal or equitable incumbrance exists for which the

canal or any of its improvements are security or guaranty, the said incumbrance should be removed by the State before the Government assumes control of the canal to make it a free highway, and appropriates money for enlarging it to fit it for an available approach to a harbor of refuge in Sturgeon Bay.

This recommendation is based upon the belief that the money realized from the sales of the land grant and from the tolls collected since the canal was opened have been ample, if economically and advantageously used, for the construction and maintenance of this work of improvement.

In conclusion, the Board would call attention to the fact that it is informed a bridge is about to be erected under State law over this waterway, with such an arrangement as to seriously interfere with navigation.

CONCLUSIONS OF THE BOARD.

(1) If the peninsula between Green Bay and Lake Michigan were now in the same natural condition as on the 10th of April, 1866, the construction of a canal between them, on or near the line of the existing canal, would be a proper work to be done by the United States in the interests of commerce and navigation; but the United States should not be made to become responsible for an insufficient canal, encumbered with a heavy lien, results due to an inefficient agency not contemplated by the original act or recognized by any subsequent act of Congress.

(2) The grant of land donated to the State of Wisconsin, act of April 10, 1866, was sufficient to have built the Sturgeon Bay and Lake Michigan Canal, and, should the Government assume control of the canal, no payment will be due, equitably or legally, for the construction and maintenance of the canal.

(3) The existing depth of 13 feet in the canal is not adequate to the demands of the largest class of vessels on the great lakes, and therefore the canal, as it now exists, has only a restricted importance.

(4) The canal is not a harbor of refuge in any proper sense, and at best is only an approach to a sheltered bay which is capable of conversion into a harbor of refuge.

(5) Sturgeon Bay is the true harbor of refuge, and, to make it available as such, an ample basin should be excavated, the canal deepened, and works constructed in Lake Michigan exterior to the existing works of protection at the canal entrance.

(6) The conversion of Sturgeon Bay into a harbor of refuge accessible through the Sturgeon Bay Canal to all vessels which navigate the great lakes, would add great security to their shipping, and may be regarded as a public necessity.

(7) Whether the Government assumes control of the canal or not, the tolls collected on the vessels using it should not exceed the actual cost of operating and maintaining the said canal.

LIST OF PAPERS AND CHARTS ACCOMPANYING THIS REPORT.

Exhibit A.—Report of Board of Engineers, 1882, and accompanying papers.
Exhibit B.—Financial statement of the canal company, 1886.
Exhibit C.—Statement of capital stock and indebtedness of the canal company.
Exhibit D.—Copy of act of legislature, State of Wisconsin, April 24, 1864, incorporating the canal company.
Exhibit E.—State act, 1873, amending State act, April 24, 1864.
Exhibit F.—Commissioner's appraisal of land grant, 1874.
Exhibit G.—Report of investigating commission, 1876.
Exhibit H.—Report of investigating committee, 1879.
Exhibit I.—Memorial to Congress from legislature, State of Wisconsin, February 6, 1877.

Exhibit K.—List of lands selected by the canal company, approved by the Interior Department, May 3, 1867.

Exhibit L.—List of land sales.

Exhibit M.—Letter of Colonel Craighill to the Chief of Engineers, referring to the filing of certain maps in the War and Interior Departments by the Governor of Wisconsin.

Exhibit N.—Reply of the Commissioner of the General Land Office, enumerating the maps filed.

Exhibit O.—Reply of the Chief of Engineers, enumerating the maps filed in the War Department and the Office of the Chief of Engineers.

Exhibit P.—State inspector's report to the Governor of Wisconsin, December 30, 1878.

Exhibit Q.—Estimate for canal excavation, 1886.

Exhibit R.—Estimate for deepening canal and Sturgeon Bay to 18 feet.

Exhibit S.—Statement of vessels passing through and taking refuge in the canal, 1885.

Exhibit T.—Rates of toll charges by the canal company.

Exhibit U.—Rules and regulations of the canal company.

Exhibit U 2.—Chicago, 1871–'84. Fluctuations in prices, with remarks.

Exhibit V.—Commercial statistics of Green Bay harbors, 1872–1885, inclusive.

Exhibit.—Commercial statistics of the canal, 1879–1886, included in Exhibits A and B.

Exhibit X.—Copy of maps (A and B) filed by the canal company with the Department of the Interior.

Exhibit Y.—Copy of map (C) filed in Madison, Wis., 1872, by the canal company, showing the final location of the canal.

Exhibit Z.—Copy of map showing the relations of the canal to Sturgeon Bay and Lake Michigan.

Exhibit Z 2.—Copy of map of the survey of the canal, 1886.

Exhibit Z 3.—Copy of Lake Survey Chart of the North End of Lake Michigan, 1867

Respectfully submitted.

WM. P. CRAIGHILL,
Lieut. Col. Corps of Engineers.
G. L. GILLESPIE,
Lieut. Col. Corps of Engineers.
W. L. MARSHALL,
Captain of Engineers.

Brig. Gen. J. C. DUANE,
Chief of Engineers, U. S. A.

EXHIBIT A.—LETTER FROM THE SECRETARY OF WAR, TRANSMITTING, IN RESPONSE TO SENATE RESOLUTION OF MARCH 9, 1882, A LETTER OF THE 6TH INSTANT FROM THE CHIEF OF ENGINEERS, SUBMITTING A COPY OF THE REPORT, WITH ACCOMPANYING MAP, OF THE BOARD OF ENGINEER OFFICERS CONSTITUTED TO CONSIDER AND REPORT THE COST OF CONSTRUCTING THE STURGEON BAY AND LKAE MICHIGAN SHIP-CANAL.

JANUARY 9, 1883.—Referred to the Committee on Commerce and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 8, 1883.

The Secretary of War has the honor to transmit to the United States Senate a letter of the 6th instant from the Chief of Engineers, submitting a copy of the report, with accompanying map, of the Board of Engineer Officers constituted to consider and report the information called for by Senate resolution of March 9, 1882, as follows:

Resolved, That the Secretary of War be, and he hereby is, instructed to ascertain and report to Congress at its next session, the cost of constructing the Sturgeon Bay and Lake Michigan Ship Canal in the State of Wisconsin, and by whom said ship canal was constructed; also to ascertain the amount of money realized from the sale of the lands granted by Congress to the State of Wisconsin to aid in the construction of said ship canal; said information being required for the purpose of considering the question of opening said ship canal free to the commerce of the lakes.

ROBERT T. LINCOLN,
Secretary of War.

The PRESIDENT *pro tempore of the United States Senate.*

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., January 6, 1883.

SIR: I have the honor to submit herewith a copy of the report, with accompanying map, of the Board of Engineer Officers constituted to consider and report the information called for by the resolution of the Senate of March 9, 1882, respecting the Sturgeon Bay and Lake Michigan Ship Canal.

Very respectfully, your obedient servant,

H. G. WRIGHT,
Chief of Engineers,
Brig. and Bvt. Maj. Gen.

Hon. ROBERT T. LINCOLN,
Secretary of War.

STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL.

REPORT OF BOARD OF ENGINEERS.

MILWAUKEE, WIS., *December* 19, 1882.

GENERAL: The Board of Engineers constituted by Special Order No. 51, Headquarters Corps of Engineers, dated Washington, D. C., June 6, 1882, to consider and report the information called for by the following Senate resolution, namely:

"IN THE SENATE OF THE UNITED STATES,
"*March* 9, 1882.

"*Resolved*, That the Secretary of War be, and he hereby is, instructed to ascertain and report to Congress, at its next session, the cost of constructing the Sturgeon Bay and Lake Michigan Ship-Canal, in the State of Wisconsin, and by whom said ship-canal was constructed; also, to ascertain the amount of money realized from the sale of the lands granted by Congress to the State of Wisconsin to aid in the construction of said ship-canal; said information being required for the purpose of considering the question of opening said ship-canal free to the commerce of the lakes.

"Attest:

"F. E. SHOBER,
"*Acting Secretary.*"

has the honor to submit the following report:

In 1866 the United States granted to the State of Wisconsin 200,000 acres of land to aid in the construction of a breakwater and a harbor and ship-canal, to connect the waters of Green Bay with the waters of Lake Michigan. The act is as follows

CHAPTER 32.—AN ACT granting to the State of Wisconsin a donation of public lands to aid in the construction of a breakwater and harbor and ship-canal at the head of Sturgeon Bay, in the county of Door, in said State, to connect the waters of Green Bay with Lake Michigan, in said State.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and hereby is, granted to the State of Wisconsin, for the purpose of aiding said State in constructing and completing a breakwater and harbor and ship-canal to connect the waters of Green Bay with the waters of Lake Michigan, two hundred thousand acres of public lands, to be selected in subdivisions agreeably to the United States survey, by an agent or agents appointed by the governor of said State, subject to the approval of the Secretary of the Interior, from lands subject to private entry: *Provided*, That said selections shall be all made from alternate and odd-numbered sections of land nearest the location of said harbor and canal in said State not otherwise appropriated, and not from lands designated by the United States as "mineral" before the passage of this act, nor from lands to which the rights of pre-emption or homestead have attached.

SEC. 2. *And be it further enacted*, That the said lands hereby granted shall be subject to the disposal of the legislature of said State, or, if the legislature thereof shall not be in session, or shall adjourn within ten days after the passage and approval of this act, then said lands shall be subject to the disposal of the governor and board of commissioners of school, university, and swamp lands of said State, for the purposes aforesaid, and for no other; and the said canal shall be and remain a public highway for the use of the Government of the United States, free from toll or charge upon the vessels of said Government, or upon vessels employed by said Government in the transportation of any property or troops of the United States.

SEC. 3. *And be it further enacted*, That before it shall be competent for said State to dispose of any of said lands, to be selected as aforesaid, the plan of said breakwater

and harbor and the route of said canal shall be established, and a plat or plats thereof shall be filed in the office of the War Department, and a duplicate thereof filed in the office of the Commissioner of the General Land Office.

SEC. 4. *And be it further enacted*, That if the said breakwater, harbor, and canal shall not be completed within three years from the passage of this act the lands hereby granted and remaining unsold shall revert to the United States.

SEC. 5. *And be it further enacted*, That the legislature of said State shall cause to be kept an accurate account of the sales and net proceeds of the lands hereby granted, and of all expenditures in the construction, repairs, and operating of said canal, and of the earnings thereof, and shall return a *a* statement of the same annually to the Secretary of the Interior. And whenever said State shall be fully reimbursed for all advances made for the construction, repairs, and operating of said canal, with legal interest on all advances until the reimbursement of the same, or upon payment by the United States of any balance of such advances over such receipts from said lands and canal, with such interest, the said State shall be allowed to tax for the use of said canal only such tolls as shall be sufficient to pay all necessary expenses for the care, charge, and repair of the same.

SEC. 6. *And be it further enacted*, That said ship-canal shall be at least one hundred feet in width, with a depth of water not less that thirteen feet.

Approved, April 10, 1866.

This grant was accepted by the State of Wisconsin and turned over to the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company by the following act:

GENERAL LAWS OF WISCONSIN, CHAPTER 105.
[*Published March* 10, 1868.]

AN ACT to accept a grant of lands made to the State of Wisconsin by act of Congress to aid in the construction of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor, in the county of Door, to connect the waters of Green Bay with Lake Michigan, and to provide for the construction of the same.

The people of the State of Wisconsin, represented in senate and assembly, do enact as follows:

SECTION 1. That the lands, franchises, rights, powers, and privileges granted to and conferred upon the State of Wisconsin by an act of Congress approved April 10, 1866, "granting to the State of Wisconsin a donation of public lands to aid in the construction of a breakwater and harbor and ship-canal at the head of Sturgeon Bay, in the county of Door, in said State, to connect the waters of Green Bay with Lake Michigan, in said State," be, and the same are hereby, accepted, with the restrictions and upon the terms and conditions contained in said act of Congress.

SEC. 2. For the purpose [of] carrying out the objects of said act, the said lands are hereby granted and conferred upon the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, a company organized in the city of Milwaukee on the 4th day of October, 1866, under and by virtue of chapter 365 of the laws of Wisconsin of 1864, approved April 24, 1864, subject to all the conditions, restrictions, and obligations herein mentioned.

SEC. 3. It shall be the duty of said ship-canal company to appoint an engineer who shall proceed to survey, lay out, and establish the route of said canal and determine the termination thereof, and also prepare a plan for the construction of said canal in conformity with the provisions of the said act of Congress, and make a diagram thereof to be approved by the Governor, and when approved by him the same shall be filed in the office of the secretary of state.

SEC. 4. It shall be the duty of the said company, after having made and filed such survey and plan of said canal, to proceed without unnecessary delay and construct the same in conformity therewith: *Provided*, That as the work on said canal progresses, the company may notify the governor that one-fourth or one-half or three-fourths of said work has been done, respectively, when upon receiving such notification, the governor shall appoint an agent to inspect the same, and if said governor is satisfied that so much of said work has been done, in accordance with the requirements of this act and of the act of Congress aforesaid, then the said governor shall certify the same to said company and deposit a copy thereof in the office of the secretary of state, and in said certifiate shall determine the proportion of said lands the said company has become entitled to in consideration of said work so done and approved by said governor, and when the governor shall make and file such certificate the commissioners of school and university lands shall convey by patent to the said company said proportions of said lands respectively, as selected by said company, and said company may proceed to sell and convey the same, and when the said company shall have completed the said canal in pursuance of the act of Congress, and in conformity with said survey and plan, it shall be the duty of the company's engineer to certify the same to the governor, whereupon it shall be the duty of the governor to

inspect the said work in person, or to appoint one or more agents to inspect the same and determine whether the said canal is constructed as required by this act. And whenever the said governor shall determine that the said canal has been constructed by the said company as required by said act of Congress, and in conformity with the plan aforesaid, he shall certify the same to said company and deposit a copy thereof in the office of the secretary of state, and which certificate, as well as any certified copy thereof, or of any other certificates mentioned in this act, under the seal of the State, shall be evidence of the facts therein set forth. And when the governor shall make and file with the secretary of state such certificate, and deliver a copy of the same to the said company, the remainder of said lands shall be patented by the commissioners of school and university lands to the said company, which shall stand seized and possessed of all said lands as fully as the State can convey the same and free from any tax for the term of ten years, if so long held by the said company, and the said company shall use all due diligence in disposing of said lands at a fair and equitable price, and they shall not be held by the said company for speculation, and when sold by said company they shall be subject to taxation: *Provided*, That previous to the issue of a patent therefor, or for any of said lands, said company shall reimburse the State for all expenses incurred on account of the same.

SEC. 5. All expenses incurred under and by virtue of this act, and of the act of Congress aforesaid, shall be paid by the company, and the State shall not in anywise be holden therefor.

SEC. 6. This act shall take effect and be in force from and after its passage.

Approved March 5, 1868.

By the terms of the fourth section of the act of Congress making the grant, all unsold land reverted to the United States, if the canal, &c., were not completed in three years. The canal was not commenced for six years, the grant being revived by an act approved March 1, 1872, extending the time for completing the canal to the 10th day of April, 1874, and at that date the first quarter of the canal had not been completed, nor had any land been sold. It would seem that additional legislation is needed in this matter.

On the 3d of March, 1873, the United States undertook the construction of what was termed a harbor of refuge at the entrance of the Sturgeon Bay Canal, which relieved the State of Wisconsin of a part of the work required by the original act.

I. Upon application to the governor of Wisconsin, the Board was informed that the canal was constructed by the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, which is the company referred to in the above act of the legislature of Wisconsin, and which appears to have acted as the agent of the State of Wisconsin in building the canal.

On the 9th of July, 1872, work was begun on the canal, and the first quarter was completed November, 1874. The work was suspended until 1877, when it was resumed and prosecuted to completion in November, 1881, the governor's certificate of completion of the canal being dated December 5, 1881.

The State required the canal to be 100 feet wide at the water's surface, with side slopes of 1 vertical to 1½ horizontal, and a depth of 13 feet, measured from the low water of 1847. The State inspector, in his final report of December 1, 1881 (which is appended hereto, marked B), says that the greater part of the canal had been dredged to a depth of 15 and 16 feet at low water.

A survey of the canal from Lake Michigan to the shore of Sturgeon Bay was made during the month of October, 1882, under the direction of the officer in charge of the harbor of refuge at entrance of the canal, that the Board might ascertain the present condition of the canal. A map of this survey is forwarded herewith. From it will be seen that the canal is 100 feet wide at the water's surface; that the 3,200 feet nearest the Lake Michigan end is revetted with sheet piling on both sides; that the next 900 feet is protected on both sides with brush and a few piles, and that the remaining 3,300 feet of canal up to the Sturgeon Bay shore is unprotected. From the Sturgeon Bay shore out to the 13-foot curve in Sturgeon Bay, a distance of 6,100 feet, the channel has been dredged as deep as the rest of the canal. The canal, for a width of 50 feet, has a general depth of 13 feet, except for a short distance near the middle of the canal, where it has shoaled up to 11 feet, both depths being measured from the low water of 1847.

II. As section 5 of the act of Congress making the grant requires the legislature of Wisconsin to cause to be kept an accurate account of the sales and net proceeds of the lands granted, the Board applied to the governor of the State of Wisconsin for a copy of this record.

The Governor, in reply, informed the Board that the canal was built by the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, and that there is no public record of what the company realized for the land grant. There being no other source of information on this point, the Board, on the 14th of July, 1882, applied to the president of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, and, under date of October 10, was informed that their total receipts from the land grant

of 200,000 acres were (see Statement D, hereto appended) $377,965.22, and the total expenses of the land department were $33,278.05, leaving $344,687.17 as the net sum realized from the land grant on the 10th of October, 1882. There was at that date due the company on the land account $1,182.84, but this will probably add but little, if anything, to the net amount realized, for a statement of the company one month later than the above (November 8) shows $273.78 received from collections in the land department, while the expenses of the same department for the month were $453.16.

III. Section 5 of the act of Congress making the land grant requires the legislature of Wisconsin to cause to be kept an accurate account of all expenditures in the construction, repairs, and operating of the canal, and of the earnings thereof. The Board applied to the governor of the State for a copy of this record, and received a reply that no such record was on file. The Board then applied to the canal company, who furnished a statement of the receipts and disbursements of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, from May 7, 1872, to October 10, 1882, certified to by Jesse Spalding, president, and William E. Strong, treasurer and assistant secretary. (See Statement D, hereto appended.) According to this statement the entire disbursements under the canal construction account, including $36,510.61 for the expenses of the office of chief engineer and superintendence and $1,016.82 for repairs, were $342,762.99.

The receipts for canal tolls and towing for the portion of the season of 1882 to September 30 amounted to $14,016.76, from which, deducting the operating expenses as per statement referred to, amounting to $8,542.30, there is left a net profit of $5,474.46 from these sources. Previous to 1882 the canal had not been accepted by the State, so the tolls are not reported as received by the company.

The Senate resolution calls for a statement of the cost of constructing the canal. As there is room for difference of opinion as to what properly comes under the head of "cost of constructing the canal," the Board thought it better to obtain from the canal company a complete statement of receipts and disbursements of the canal company, which was furnished up to October 10, 1882. (Appended hereto, marked D.) According to this statement there were, in addition to those already mentioned, the following expenses:

Organization and bond expense accounts	$10,669	25
General expense account (Chicago office)	22,828	92
Interest account	12,974	32
Miscellaneous expenses (United States Light-House Department), $370.39, less miscellaneous receipts, $351.03	19	36
Advances on land contracts sold	393	27
	46,885	12

As the net receipts from the land grant and tolls and towing exceeded the entire disbursements for canal construction and repairs and operating expenses by $7,398.64, this would make the entire disbursements exceed the receipts to October 10, 1882, by $39,486.48.

In determining the question as to how much of these disbursements can legitimately be charged to the cost of constructing the canal, the Board would refer to the majority and minority reports of the committee of the Wisconsin legislature, published in the Annual Report of the Chief of Engineers, United States Army, for 1879, pages 1494–1505. In the majority report, page 1497, is the following:

"The last charge which we shall here notice is that the principal office of the [canal] company is not kept in Wisconsin in accordance with the requirements of the statute. The officers claim that they have an office in Milwaukee which is the only distinctive office which the company has. The president, secretary, and treasurer draw no salary, and perform such official acts as devolve upon them at their private offices. The land department is under the charge of D. W. Maxon, and the superintendence of the construction of the canal is under the charge of the chief engineer, Capt. W. T. Casgrain, both of whom have an office at 102 Wisconsin street, Milwaukee, which is rented and paid for by the company."

The expenses of the Milwaukee office here referred to, as well as all other expenses connected with the land and engineer departments, have been included in the statements heretofore made as to the net receipts from the land grant and the total disbursements for constructing the canal.

At the close of the statement of receipts and disbursements of the canal company is the following remark:

"In the foregoing statement no interest has been charged on the money advanced by the stockholders in 1872 and 1873.

"We will furnish in a few days a detailed statement of the interest account on the moneys advanced, from the date of such advances to the present time at the current rates.

"No charge has been made in the foregoing accounts for services rendered by the officers of the company having the work in charge since 1872, other than the chief engineer and land commissioner, except the sum of $6,250 paid the treasurer and assistant secretary for a portion of the time."

The Board wrote for this additional information, and finally received a detailed statement of interest account (marked E) and a supplementary statement of receipts and disbursements, dated November 8, 1882 (marked F). It appears to the Board that the object of section 5 of the act granting the land to aid in the construction of the canal could be entirely defeated if salaries for the various officers of a corporation could be charged as a part of the expenses of the State "for the construction, repairs, and operating of said canal."

In conclusion, the Board would summarize this report by saying that, from the available information, the Sturgeon Bay and Lake Michigan Ship-Canal was built by the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, under a charter of the State of Wisconsin; that they realized from the land grant of 200,000 acres a net sum of $344,687.17, and that the construction of the canal, including engineering, superintendence, and the expenses of the officers in Wisconsin and repairs was $342,762.99.

As the Senate resolution calls for this information "for the purpose of considering the question of opening said ship-canal free to the commerce of the lakes," and the letter of instructions directs the Board to "procure such information as in its judgment may be necessary to a proper investigation of the subject," the Board obtained from the canal company full statements of receipts and expenses and moneys advanced, with interest charged, and that the amounts that they would expect to receive in case the Government should decide to take control of the work. This latter amount is $178,168.58. The method of arriving at this amount will appear from the statements which, with other papers, are appended to this report, as follows:

"Map of survey of Sturgeon Bay and Lake Michigan Ship-Canal made for the Board, October, 1882.

"(A) Certificate of the Governor of the State of Wisconsin of the completion of the Sturgeon Bay and Lake Michigan Ship-Canal.

"(B) Final report of the State inspector on the Sturgeon Bay and Lake Michigan Ship-Canal.

"(C) Letter of the president of the Sturgeon Bay and Lake Michigan Ship-Canal Company, dated October 10, 1872, forwarding certain papers to the Board and explaining certain disbursements.

"(D) Statement of receipts and disbursements of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company from May 7, 1872, to October 10, 1882.

"(E) Statement in detail of interest paid by the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company from May 7, 1872, to October 10, 1882, as appearing in statement of receipts and disbursements (D.)

"(F) Statement of the total cost of the Sturgeon Bay and Lake Michigan Ship-Canal, including interest on advances made by the stockholders and expenses incurred in managing canal to December 1, 1882.

"(G) Letter of the president of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company explanatory of Statement F.

"(H) Statement in detail of cash advances by stockholders in 1872 and 1873 to the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, as appearing in Statements F and G.

"(I) Statement of the number and tonnage of vessels passing through the Sturgeon Bay and Lake Michigan Ship-Canal for the seasons 1879, 1880, and 1881, and to October, 1, 1882.

"(K) Statement supplementary to Statement I."

Respectfully submitted.

D. C. HOUSTON,
Lieut. Col. of Engineers, Brevet Colonel.
HENRY M. ROBERT,
Major of Engineers.

Brig. Gen. H. G. WRIGHT,
Chief of Engineers, U. S. A.

A.

CERTIFICATE OF THE GOVERNOR OF THE STATE OF WISCONSIN OF THE COMPLETION OF THE STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL.

UNITED STATES OF AMERICA:

The State of Wisconsin. William E. Smith, Governor. To all to whom these presents shall come, greeting:

Whereas it appears by the report of the agent appointed by me to inspect the work done on the Sturgeon Bay and Lake Michigan Ship-Canal, bearing date the 1st instant, that said canal has been completed in accordance with the requirements of the act of Congress approved April 10, 1866, and of the acts of the legislature of the State of Wisconsin relating thereto;

Now, therefore, I, William E. Smith, governor of the State of Wisconsin, do hereby certify that the Sturgeon Bay and Lake Michigan Ship-Canal has been completed, as required by the acts aforesaid, and in conformity with the established plans duly approved; and that in consideration thereof, the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company is entitled to a patent for the remainder of the lands granted by said act of Congress to aid in the construction of said canal.

In witness whereof I have hereunto set my hand and caused the great seal of the State of Wisconsin to be affixed. Done at the capitol, in the city of Madison, this fifth day of December, in the year of our Lord one thousand eight hundred and eighty-one.

[SEAL.] WILLIAM E. SMITH.

By the Governor:
HANS B. WARNER,
Secretary of State.

UNITED STATES OF AMERICA,
State of Wisconsin, Department of State, ss:

To all to whom these presents shall come:

I, Ernst G. Timme, secretary of state of the State of Wisconsin, do hereby certify that the foregoing copy of certificate by the governor, of the completion of the Sturgeon Bay and Lake Michigan Sihp-Canal, has been compared by me with the original certificate, in this department, and that the same is a true copy thereof, and of the whole of such original.

In testimony whereof I have hereunto set my hand and affixed my official seal, at the capitol, in the city of Madison, this 19th day of July, A. D. 1882.

[SEAL.] ERNST G. TIMME,
Secretary of State.

B.

FINAL REPORT OF THE STATE INSPECTOR ON THE STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL.

MADISON, WIS., *December* 1, 1881.

GOVERNOR: I have the honor to inform your excellency that I have, in obedience with your instructions dated November 18, 1881, visited the "Sturgeon Bay and Lake Michigan Ship-Canal," and having examined and inspected the same, beg leave to submit the following statements and report:

The canal is completed in accordance with the acts of Congress and of the legislature of the State of Wisconsin, which require a canal of 100 feet wide at the water surface and of 13 feet deep, without any special reference to details or mode of construction, the State having this matter in trust has presumed to construe the action of Congress and of the legislature, as requiring a canal of the above dimensions constructed on such plan and in such manner as would promise to give a work of reasonable permanence.

It was at first supposed that the canal cut would stand without revetment of the banks, but as the work progressed it was found that nearly one-half the length of the dry cutting (the whole length is 7,300 feet), where the banks were high and the subsoil of pure sand, required revetment. The company has put in this revetment in the most substantial manner. The length of this revetment in the canal is 3,200 feet on

each side of the Lake Michigan end; the company has also put in similar revetment outside of the canal extending from the mouth of the canal to the Government piers 750 feet on the lake front. In the canal beyond the revetment the subsoil is of a sandy marl overlaid by sand. The marl withstood the action of the waves, but the sand yielded, causing a caving of the banks. To prevent this wearing and consequent filling of the channel, the company has put in a brush protection for a distance of 700 feet on each side. This protection is built by driving piles in line 6 feet apart; the brush is made in bundles 10 to 12 feet long; a number of these fascines are laid lengthwise behind the piles to the height of water surface, then in layers slightly oblique to a right angle with the canal; the tips are placed against the banks so that the butts form a wall along the canal; the brush is loaded with driftwood to keep the same in place until securely matted in with sand, which will hold them securely in place. Beyond the terminus of the brush protection, the marl banks are sufficiently stable to prevent washing or caving by wave action. The cut in the flats at the head of Sturgeon Bay preserves its depth, showing that there is no wear of the submerged banks.

There is a bend in the cut in the bay 4,000 feet northwest from canal. Here the company has dredged a very wide channel in order that vessels may turn or pass each other without danger of collision.

A great source of annoyance during the progress of the work was the presence of much surface water, which continually trickled out from and undermined and let down large sections of the highest banks; this has been entirely remedied by sloping the surface from the canal to back drains which convey a great deal of water. These drains are from 10 to 25 feet wide, running parallel with the canal, and emptying into the bay near the canal.

While making this examination I was enabled to observe the practical operating of the canal by various classes of vessels and under variable conditions of wind and weather.

From my own observation and examination of the toll-books of the canal I am enabled to insert here in tabular form the operations of commerce through the canal and amount of lumber carried in various ways. The canal was much obstructed by dredges during the greater part of the season, otherwise the number of passages would be greater.

1881.	Steamers, freight and passengers.	Sailing in.	Vessels out.	Total sail vessels.	Tugs.
April	.....	12	6	18	5
May	13	85	67	152	90
June	4	165	117	282	184
July	8	190	117	307	219
August	.....	185	113	298	207
September	1	138	80	218	160
October	1	165	85	250	139
November, to 24th	.....	91	72	163	117
Totals	27	1,031	657	1,688	1,121

The number of tug-boats given are only those towing vessels in or out. The total number of sailing vessels is 1,688, while the number of tows is only 1,121, from which it will be seen that 567 sailing vessels made the passage without tugs and with safety. The total tonnage of vessels passing was 350,000 tons; 306 vessels carried 84,000,000 feet of lumber; 2,500,000 was passed in rafts, and 2,188,000 on scows; 2,265 tons of building stone passed the canal by sail. The number of logs, ties, shingles, and other merchandise could not readily be ascertained. Among some of the larger vessels passing are the following: Schooner George Murray, 790 tons register; steamer Oconto, 505 tons register; United States steamer Andrew Johnson, 499 tons register.

The steamer Mantenee passed through on November 12, drawing 13 feet 2 inches. Many of the larger vessels passing draw from 10 to 13 feet.

Of vessels now trading in the canal, 55 have run in for refuge from Lake Michigan, 16 in September, 25 in October, and 14 in November. There is no doubt but some of these would have been lost had they not had this refuge at hand. The total number of vessels which passed through the canal in 1880, while yet in an unfinished condition, was 533, with a tonnage of 113,497 tons.

On the 25th of this month the steam-barge Bismarck, with three large lumber barges in tow, parted her tow-line on Lake Michigan, only a few miles from the canal; the sea was so great that she was unable to pick them up again, neither was there a tug at hand to give assistance; the barges set sail, made the harbor, and succeeded in running into the canal. The foregoing will show that the canal is completed and in successful operation, and there is no doubt that traffic will increase in a short time. The channel for the greater part is dredged to a depth of 15 and 16 feet below low water, which will take up any filling which may occur from wind, drifts, or currents for a considerable time. Although this work is a success as a highway, it is not what it should be as a harbor of refuge. The outer harbor is insufficient as a harbor of refuge for several reasons. In the first place, it is entirely too small for anything like the fleets which were forced to seek refuge in the canal during the season just passed, and in the second place, if it was larger it is a question if it would be any more tenable than it is now. The piers are completed to the full extent as they were designed, with some additional work beyond the pier-heads to make the entrance safer and surer. In the basin there is as yet only a narrow channel by which vessels can enter; the remainder is nearly the same as the natural lake bottom, with 7 to 10 feet of water; the storm waves from the lake enter with great momentum, which, meeting with resistance in shallow water, is converted into vertical motion, creating great disturbance, so as to make it entirely untenable for vessels. It is possible that this may be remedied to a great extent by dredging out the basin and rendering the entrance to the canal safer and easier than at present, but vessels seeking refuge will have to enter the canal. During the season just passed the canal was fairly lined with vessels for a long distance, thereby rendering it difficult and dangerous for other vessels to enter and pass. If they run through, they must go to the bay, three or four miles, and pay both towage and toll. To avoid this they remain in the canal, where there is not room for them.

I venture these rather lengthy remarks to explain what I have seen from actual observation, that is, that there is no harbor of refuge in the true sense of the word. It is important that there should be one. The canal can be operated and maintained, but since the canal company have fulfilled their obligations this will have to be done from the tolls collected, and it is a question if these will be sufficient to settle damages in addition to making repairs if the canal is used as a refuge as it has been.

To construct an outer harbor would involve great expense, and should the Government dredge out a basin at the inner end, there would still be the difficulty about canal tolls, which could only be settled by action of Congress.

It would, in my opinion, be to the interest of commerce if the United States would assume control of this important work as early as possible, in fact, at once, for there is no doubt that it will have to come to this sooner or later, and the sooner the better in every respect. It may, in fact, have been a mistake in the first place for the Government to have let this work go out of its hands, and the best it can do is to get it back while it is yet new and in good condition There is no doubt it has, in fact, already been sufficiently demonstrated that this canal is destined to be a great commercial highway, and if in the control of the General Government, the tolls can be removed from vessel seeking refuge, and a suitable safe harbor can be constructed at the head of Sturgeon Bay at a very moderate cost.

I feel safe in saying that with the increasing commerce in this highway the Government could in a few years at furthest reduce the tolls to a minimum, making the canal virtually free, a great desideratum to lake commerce and the development of our natural resources.

The canal company can have no serious, or in fact any, objection to the change suggested above, for, having completed the work according to law, it has no further pecuniary interest; the tolls collected must be accounted for and be paid to the Government until the same is reimbursed the value of the grant.

In conclusion, I will state that my survey, examination, and observations, in accordance with instructions for final inspection, show that the canal is now completed in such a manner that the company is lawfully entitled to all the benefits provided by the acts of Congress and of the legislature.

Respectfully submitted.

JOHN NADER,
Agent for the State Inspector of Canal.

To his Excellency WILLIAM E. SMITH,
Governor of Wisconsin.

UNITED STATES OF AMERICA.
State of Wisconsin, Department of State, ss:

To all to whom these presents shall come:

I, Ernst G. Timme, secretary of state of the State of Wisconsin, do hereby certify that the annexed copy of the report by John Nader, agent for State inspector, of the

completion of the Sturgeon Bay and Lake Michigan Ship-Canal, has been compared by me with the original report in this department, and that the same is a true copy thereof, and of the whole of such original report

In testimony whereof, I have hereunto set my hand and affixed my official seal at the capitol, in the city of Madison, this nineteenth day of July, A. D. 1882.

[SEAL.]

ERNEST G. TIMME,
Secretary of State.

C.

LETTER OF THE PRESIDENT OF THE STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL COMPANY TO THE BOARD OF ENGINEERS.

CUSTOM-HOUSE, CHICAGO, ILL.,
Collector's Office, October 10, 1882.

GENTLEMEN: I forward to you to-day statement of the canal company's receipts and disbursements, &c., from May 7, 1872, to date (October 10); also statement showing in detail the sales of the land grant of about 200,000 acres; also a statement of the number of vessels passing through the canal during the years 1879, 1880, 1881, and to October 1, 1882. In further explanation of the item of $877.30 paid the contractor, O. B. Green, in 1882, being 5 cents per yard on 17,546 yards of material removed by the Green Bay Dredging and Driving Company in 1879, I wish to say: Under a misapprehension of the terms of the company's contract with Mr. O. B. Green, a contract was awarded to the Green Bay Company to do some dock work on the canal, in connection with which there were several thousand yards of material to be removed. Mr. O. B. Green, the contractor, claimed that under the terms of his contract with the company he was to do all the piling, docking, and dredging. His contract price for dredging was 20 cents per yard. Upon a careful examination of the contract it was decided that Mr. Green was right. However, he waived his claim so far as the docking was concerned, but claimed the difference between 15 cents and 20 cents per yard for the number of yards necessary to remove to construct said dock. In order to settle the matter satisfactorily with all parties, the canal company agreed to pay the Green Bay Company 15 cents and Mr. Green 5 cents per yard. By an oversight on Mr. Green's part, his claim was not presented until recently, when it was adjusted and paid in accordance with the agreement made in 1879.

Very truly, yours,

JESSE SPALDING,
President.

Col. D. C. HOUSTON and Maj. H. M. ROBERT,
United States Engineers.

D.

STATEMENT OF RECEIPTS AND DISBURSEMENTS OF THE STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL AND HARBOR COMPANY FROM MAY 7, 1872, TO OCTOBER 10, 1882.

Cash receipts from May 7, 1872, *to October* 10, 1882.

Received from capital stock:		
During 1872, 5 per cent. paid on 359 shares	$1,795 00	
During 1873, 95 per cent. paid on 6 shares	570 00	
During 1878, sale of 3 shares	300 00	
Total		$2,665 00
Cash loans paid with stock at par:		
1872–'73, from the Peshtigo Company	26,785 69	
1872–'73, from Jesse Spalding	10,732 55	
1872–'73, from Isaac Stephenson	10,732 55	
1872–'73, from F. B. Gardner	10,732 55	
Total loan in cash		58,983 34
Total from capital stock of company		61,648 34

From trespasses on land grant and sales of dead and down timber, being collections by timber clerks and assistants:		
During 1872, from State treasurer of Wisconsin	$26,021 17	
During 1873, from State treasurer of Wisconsin	9,475 89	
During 1874, from State treasurer of Wisconsin	2,941 63	
During 1875, from State treasurer of Wisconsin	1,617 80	
During 1876, from State treasurer of Wisconsin	526 08	
During 1877, from State treasurer of Wisconsin	2,833 43	
During 1878, from State treasurer of Wisconsin	2,834 26	
During 1879, from State treasurer of Wisconsin	1,298 65	
During 1880, from State treasurer of Wisconsin	467 29	
During 1881, from State treasurer of Wisconsin	105 00	
	48,121 20	
From lands prior to patents from State:		
During 1880, on lands patented to company	1,284 62	
During 1881, on lands patented to company	3,637 13	
Total realized from t espasses, &c		$53,042 95
Realized from sale of land grant—from sales of lands patented to canal company:		
Collections and sale of contracts during 1877	$90,945 16	
Collections and sale of contracts during 1878	70,094 96	
Collections and sale of contracts during 1879	47,081 25	
Collections and sale of contracts during 1880	38,679 91	
Collections and sale of contracts during 1881	56,207 69	
Collections and sale of contracts during 1882	21,913 30	
Total from sales of land grant		324,922 27
Realized from first-mortgage bonds issued and paid to Green, Fox & Howard, contractors, December, 1874, canceled and paid April 24, 1877		8,000 00
Realized from canal tolls and towing, collections from vessels for toll and towing, from March, 1882, to September 30, 1882		14,016 76
Receipts from miscellaneous sources:		
From Chicago and Northwestern Railway Company in 1879, for right of way through canal lands	$150 00	
From dockage on ties, posts, &c., landed on bank of canal in 1880	82 78	
Landed on bank of canal in 1881	118 25	
Total from miscellaneous sources		351 03
Total receipts from May 7, 1872, to October 10, 1882		461,981 31

Disbursements from May 7, 1872, to October 10, 1882.

Canal construction account, on vouchers of chief engineer on file.

Dredging, dry and wet excavation:		
Axtell, Harris & Gutches, 1872, 191,035 yards, at 30 cents	$57,310 50	
The Peshtigo Company, 1873, 40,983 yards, at 30 cents	12,294 90	
F. B. Gardner, 1873, 32,087 yards, at 30 cents	9,626 10	
Green, Fox & Howard, 1874, 24,649 yards, at 33 cents	8,134 17	
*Green Bay Dredge and Pile-Driver Company, O. B. Green, 1879, 17,546 yards, at 20 cents	3,509 20	
O. B. Green, 1877–'81, 841,324¾ yards, at 20 cents	168,264 95	
Total, 1,147,624¾ yards, costing		$259,139 82
Clearing, grubbing, and draining route of canal:		
1872–'73. Lawrence and Foss, clearing	3,230 00	
1873. William E. Strong, contractor, clearing and draining	1,188 06	
1878. O. B. Green (paid in 1882), clearing, &c	178 33	
		4,596 39
Docking Lake Michigan entrance:		
1879. Green Bay Dredging and Pile-Driver Company, 690 feet, at $3.95 and $4.75	2,964 00	
1880–'81. O. B. Green, 601 feet, at $7.25	4,357 25	
		7,321 25

Revetment from Lake Michigan, west:		
1880. O. B. Green, 3,022 feet, at $5.25	$15,865 50	
1881. O. B. Green, 3,007 8/10 feet, at $5.30	15,941 34	
		$31,806 84
Brush revetment from station 41, west:		
1881. O. B. Green, 1,400 feet, at $1.64	2,296 00	
1881. O. B. Green, labor, protecting banks	75 25	
		2,371 25
Repairs, damages by storms, &c., to docking:		
1880. O. B. Green, repairing docking	203 37	
1881. O. B. Green, repairing harbor front	812 46	
		1,016 83
Overseeing and incidental expenses, chief engineer:		
Salary of W. T. Casgrain, chief engineer, from May 5, 1872, to December 3, 1881	22,602 45	
Pay-roll of assistants and employés from May 5, 1872, to December 31, 1881	8,451 26	
Traveling, office, and incidental expenses chief engineer's office	4,533 73	
Maps, tracings, and office furniture, engineer department	923 17	
Total superintending and incidental expenses		36,510 61
Total construction disbursement		342,762 99
General expense account, Chicago office:		
Salaries, legal, traveling, and incidental expenses from May 1, 1872, to October 10, 1882		22,828 92
Land department account:		
Salaries of land commissioner and assistant, traveling, office, and incidental expenses relating to the sale of land grant, from May, 1877, to July 31, 1882		17,756 02
Real estate account:		
Payments to assistant timber clerks, for services and expenses, examination of lands for appraisal, investigating trespasses, &c., from May, 1872, to December 31, 1881		15,522 03
Organization account:		
Paid Joseph Harris, December 12, 1872, for expenses from 1864 to 1872, prior to organization of company		4,110 00
Bond expense account:		
Paid M. L. Scudder, jr., financial agent and trustee, expenses and services as financial agent and trustee for bondholders.	$4,250 00	
Paid Sinnot & Meyer, attorneys, New York, preparing first mortgage land grant bonds	1,511 55	
Paid for lithographing and engraving bonds and maps, printing pamphlet, and advertising bonds for sale	797 70	
		6,559 25
First mortgage bond account:		
Bonds paid and canceled April 24, 1877		8,000 00
Interest account:		
Interest coupons on bonds, from December, 1874, to April, 1877		
Interest on notes and accounts, collection of drafts, &c		12,974 32
Canal operating account expenses:		
Salary of superintendent and assistant, pay-rolls of employés, repairs and dredging in canal, incidental expenses, superintendent, charter of tug for towing through canal from April 1 to September 1, 1882		8,542 30
United States light-house department:		
Payments in connection with condemnation of land for site of light-house, Sturgeon Bay, including cost of site, attorney, and court fees		370 39
Advances on land contracts sold:		
Advanced and paid under guarantee, past-due payments on contracts sold, contracts in hands of land commissioner for collection, advances in excess of collections		393 27
Total disbursements to October 10, 1882		439,819 49

*Of this item, 17,546 yards, the Green Bay Dredge and Pile-Driver Company received 15 cents per yard and O. B. Green received 5 cents per yard. (Paid in 1882.)

Cash statement.

Receipts as per statement	$461,981 35
Disbursements as per statement	439,819 49
Balance on hand October, 1882	22,161 86

In the foregoing statement no interest has been charged on the money advanced by the stockholders in 1872 and 1873.

We will furnish, in a few days, a detailed statement of the interest account on the moneys advanced, from the date of such advances to the present time, at the current rates.

No charge has been made in the foregoing accounts for services rendered by the officers of the company having the work in charge, since 1872, other than the chief engineer and land commissioner, except the sum of $6,250 paid the treasurer and assistant secretary for a portion of the time.

Resources of Canal Company, October, 1882.

Completed canal, including right of way, from Lake Michigan to Sturgeon Bay:		
Cash on hand October 10, 1882		$22,161 86
Land grant:		
120 acres of land unsold, contracts for which were foreclosed and canceled on account of non-payment, originally sold for	$230 00	
Collected on same	88 42	
	141 58	
Land contracts unsold:		
Payments on which are past due	176 00	
Payments maturing in 1882 and 1883	471 99	
Advances made under guarantee on contracts sold, collections not being made at maturity	393 27	
Total due from land grant		1,182 84
Personal property:		
Including maps, tracings, instruments, and office furniture, in offices of land commissioner and engineer department, cash valuation nominal, say		150 00
Available assets exclusive of canal		23,494 70

We hereby certify that the foregoing statement is correct, to the best of our knowledge and belief.

JESSE SPALDING,
President.
WM. E. STRONG,
Treasurer and Assistant Secretary.

E.

STATEMENT IN DETAIL OF INTEREST PAID BY THE STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL AND HARBOR COMPANY FROM MAY 7, 1872, TO OCTOBER 10, 1882, AS APPEARING IN STATEMENT OF RECEIPTS AND DISBURSEMENTS.

EXPLANATORY REMARKS.

*In order to carry on the work of construction and complete the first quarter of the canal, securing thereby the first quarter in value of the land grant, money had to be advanced beyond the loans made by the stockholders in 1872 and 1873, the company having no resources other than the lands.

The Peshtigo Company paid the bills for carrying on this work from September, 1873, till the spring of 1876. In May, 1876, Hon. William B. Ogden, president of the canal company, having been authorized by the board of directors, borrowed $41,500 from the Third National Bank of New York, which sum was applied in payment of

the company's indebtedness at that date. This loan was liquidated by the canal company in 1877 and 1878 by the first moneys realized from sales of land.

The interest on this loan from May 31, 1876, to August 22, 1878, amounting to $4,452.88, was paid by the company.

Cash payments of interest by the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company from May 8, 1872, to October 10, 1882.

1873.			
Oct.	20.	Paid stockholders in settlement of loan accounts, closing loan accounts after issue of stock	$16 39
		Interest on note to Green, Fox and Howard, contractors:	
1875.			
July	5.	$350.76, dated December 1. 1874, $6\frac{3}{30}$ months, at 7 per cent	12 47
1876.			
July	31.	$514.19, dated December 1, 1874, 8 months, at 7 per cent	23 99
Feb.	12.	Interest on account, Henry Seibert & Bro., New York, lithographing and engraving bonds, maps, &c., $721.60, 1 year 6 months, at 7 per cent	75 75
June	1.	*Interest on cash advances by the Peshtigo Company to William E. Strong, treasurer, carrying on work of the construction of canal from September 15, 1873, to June 1, 1876, represented by a disbursement of $20,547.76. Interest on disbursements from date of same to June 1, 1876, at simple interest, at 10 per cent	2,735 89
		Interest on account with the Peshtigo Company for dredging, September and October, 1873, draining and clearing route of canal, May, June, and July, 1873, examining canal lands in 1874. Interest to June 1, 1876, at 10 per cent	1,433 79
		Interest on account with F. B. Gardner, dredging, September, 1873. Interest to June 1, 1876, on $2,360.94, at 10 per cent	629 57
		Interest on account with Sinnot & Meyers, attorneys, drawing mortgage bonds, &c., paid by W. B. Ogden, December 31, 1875. Interest on $1,511.55, from January 1, 1876, to June 1, 1876, at 10 per cent	62 98
		Interest on amount paid by W. B. Ogden, February 12, 1876, to Henry Seibert & Bro., lithographing, &c., $721.50, and interest $75.75 = $797.25. Interest on this amount, $797,25, from February 12, 1876, to June 1, 1876, $3\frac{18}{30}$ months, at 10 per cent	23 92
		Interest on account with Charles D. Robinson, director, traveling expenses, $210, May, 1872, to January, 1876. Interest to June 1, 1876, at 10 per cent	31 87
		Interest on account with Jesse Spalding, president, &c., traveling expenses, &c.:	
		$213.40 from May 1, 1874, to June 1, 1876, 2 years 1 month, at 10 per cent	44 46
		$115 from January to September, 1874, to June 1, 1876, at 10 per cent	21 98
		$246.85 from August, 1875, to June 1, 1876, at 10 per cent	11 43
		Interest on account with Isaac Stephenson, director, traveling expenses, &c.:	
		$190.50 from May 1, 1874, to June 1, 1872, 2 years 1 month, at 10 per cent	39 68
		$134.80 from February 1, 1876, to June 1, 1876, 4 months, at 10 per cent	4 49
		$187.60 from May, 1872, to March, 1875, to June 1, 1876, at 10 per cent	48 16
	3.	Interest on note to Green, Fox & Howard, contractors: $107.05 from December 1, 1874, to June 1, 1876, 1 year 6 months, at 7 per cent	10 17
		*Interest on loan from Third National Bank of New York:	
Nov.	25.	$41,500 from May 31, 1876, to November 25, 1876, 5 months 28 days, at 7 per cent	1,436 37
1877.			
May	25.	$41,500 from November 25, 1876, to May 28, 1877, 6 months 3 days, at 7 per cent	1,464 43

1878.				
Aug.	22.	$41,500 from May 28, 1877, to final payment of note, at 7 per cent		$1,552 08
1877.				
May	1.	Interest on note to M. L. Scudder, jr., financial agent and trustee, for services:		
		$4,000 from February 17, 1877, to May 1, 1877, 73 days, at 8 per cent		64 89
		Interest on notes to O. B. Green, contractor, given in payment on contracts:		
1878.				
Aug.	12.	$1,353.24 from August 12, 1878, to November 13, 1878, 93 days, at 8 per cent		27 00
Dec.	14.	$1,417.60 from September 13, 1878, to December 14, 1878, 93 days, at 8 per cent		29 30
1879.				
Jan.	11.	$4,656.74 from October 11, 1878, to January 11, 1879, 93 days, at 8 per cent		96 24
Mar.	15.	$2,400 from January 11, 1879, to March 15, 1879, 63 days, at 9 per cent		37 80
June	16.	$1,800 from March 25, 1879, to June 16, 1879, 93 days, at 9 per cent		41 95
Aug.	5.	$3,000 from August 5, 1879, to November 6, 1879, 93 days, at 8 per cent		62 00
		$2,742.92 from August 5, 1879, to December 6, 1879, 123 days, at 8 per cent		74 97
		Paid bank collections and discounts on drafts, &c.:		
June	16.	Discount on 60-day draft, $525, from Schofield & Co		7 55
Aug.	4.	Collection of check on Oconto bank		25
Oct.	21.	Collection of check on Milwaukee, $748.63		74
	9.	Interest to Green Bay Dredge and Pile Driver Company, on past due payment on contract, $1,195.56, 25 days, at 8 per cent		6 64
		Interest paid on past due payments on land contracts:		
Aug.	14.	Sold A. H. Green, New York		25
Sept.	26.	Sold A. H. Green, New York		1 35
Oct.	31.	Sold A. H. Green, New York		65
Dec.	2.	Sold A. H. Green, New York		1 74
Dec.	15.	Sold A. H. Green, New York		11
		Paid bank collection of drafts and checks:		
1881.				
May	23.	Collection of check on Milwaukee bank		1 09
July	25.	Collection of check on Green Bay bank		91
Sept.	30.	Collection of draft on New York, $5,000		5 00
Dec.	23.	Collection of draft on New York, $10,000		10 00
				10,151 26

Interest, coupons, discount, and gold premium on $8,000 *mortgage bonds, issued to contractors in payment on contracts December* 1, 1874, *paid and canceled May* 1, 1877.

1875.				
Jan.	1.	Discount on 8 bonds of $1,000 each, taken at 90 cents, or 10 per cent. discount, by O. B. Green, Fox & Howard contractors	$800 00	
		Interest on $8,000, from December 1, 1874, to February 1, 1875, date of coupons detached, 2 months, at 7 per cent., $93.33; premium in gold, 10 per cent., $9.33		102 66
		Payment of coupons No. 3 on the 8 bonds, 6 months' interest, at 7 per cent., due August 1, 1875 (February 1 to August 1)	280 00	
		Paid coupon No. 4, due February 1, 1876, 6 months' interest, at 7 per cent	280 00	
		Paid coupon No. 5, due August 1, 1876, 6 months' interest, at 7 per cent	280 00	
		Paid coupon No. 6, due February 1, 1877, 6 months' interest, at 7 per cent	280 00	
		Premium on gold payments being made in currency	113 47	
		Accrued interest on coupons not paid at maturity	26 93	

1875.			
Jan.	1.	Accrued interest on bonds from February 1, 1877, date of last coupon paid, to May 1, 1877, date of payment of bonds, $8,000, 4 months, at 7 per cent	$140 00
		Premium on gold-paying $8,000 gold bonds May 1, 1877, principal and interest being payable in gold	520 00
		Total interest paid in cash	12,974 32

We hereby certify that the foregoing statement is correct, to the best of our knowledge and belief.

JESSE SPALDING,
President.
WM. E. STRONG,
Assistant Secretary and Treasurer.

F.

STATEMENT OF THE TOTAL COST OF THE STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL, INCLUDING INTEREST ON ADVANCES MADE BY THE STOCKHOLDERS, AND EXPENSES INCURRED IN MANAGING THE CANAL TO DECEMBER 1, 1882.

CHICAGO, *November* 8, 1882.

GENTLEMEN: In answer to your letter of October 23, asking for a statement of the total cost of the canal, the total receipts realized from the lands, and the amount which the company would expect to receive in case the Government should decide to take the contract of the work, I wish to say—

The total cost of the Sturgeon Bay Canal, including interest on advances made by the stockholders to December 1, 1882, and expenses incurred in managing canal to October 10, 1882, is $642,615 57

Actual disbursement from October 10, 1882, to November 8, 1882, vouchers of superintendent for months of September and October	$3,779 77	
Land commissioner's office: salary and expenses of land commissioner to October 31, 1882	453 16	
		4,232 93

Estimated expenses of managing canal and land department from date of unpaid services to December 1, 1882:

Canal operating account:		
Charter of tug, November	1,500 00	
Salary of superintendent, November	150 00	
Salary of assistants, November	95 50	
Incidental expenses, November	35 00	
Dredging 1,550 yards	225 00	
Total operating canal	2,005 50	
Land commissioner's office:		
Salary and expenses of land commissioner, November 1 to December 1, 1882	150 00	
		2,155 50

Receipts from every source from May 7, 1872, to October 10, 1882, have been as follows:

Realized from the land grant of 200,000 acres	377,965 22	
From original subscriptions to capital stock	2,665 00	
From sale of bonds	8,000 00	
Receipts from canal season of 1882 to October 10	14,016 76	
From miscellaneous sources	351 03	
From loans by stockholders in 1872 and 1873	58,983 34	
	461,981 35	

Receipts from October 10, 1882, to November 8, 1882:		
From canal tolls	2,775 38	
From land grant:		
Collections on land contracts in October	273 78	
From past due contracts: Advances, collections by the land commissioner	348 66	

Estimated receipts from November 8 to December 1:		
Canal tolls and towing to close of season of navigation, 1882	$5,000 00	
Face valuation of unsold contracts on hand	456 25	
		$470,835 42
		178,168 58

If the Government should decide to take control of the work the canal company would expect to receive December 1, 1882, the sum of $178,168.58.

Yours, very truly,

JESSE SPALDING,
President.

Col. D. C. HOUSTON and Maj. HENRY M. ROBERT,
United States Engineers.

G.

LETTER OF THE PRESIDENT OF THE STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL AND HARBOR COMPANY EXPLANATORY OF STATEMENT F.

STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL AND HARBOR COMPANY,
Chicago, November 18, 1882.

DEAR SIR: In answer to your letter of the 16th instant, I wish to say that the items you ask for, making up the balance of $642,615.57, the cost of the canal to December 1, 1882, are as follows, viz:

Cash advances made by stockholders in 1872 and 1873, with interest to December 1, 1882, as per schedule herewith forwarded		$140,383 58
The par value of 456 shares ($45,600) of full-paid stock, four hundred and fifty shares, of which ($45,000) were issued September 9, 1872, to the officers and directors, by a vote of the board, for services rendered and expenses incurred prior to that date		45,600 00
To the officers and directors	$45,000 00	
To the chief engineer, for services during the construction of the canal	300 00	
To the chief engineer, paid for in cash	100 00	
To Joseph Harris, paid for in cash	100 00	
To C. D. Robinson, paid for in cash	100 00	
	45,600 00	

A fair and reasonable compensation for the services rendered by the president, treasurer, and assistant secretary, and book-keeper, from September 9, 1872, to December 9, 1882, a period of ten years and three months.

To the president, $1,000 a year	$10,250 00	
To the treasurer and assistant secretary, $1,000 a year, less $6,250 paid	4,000 00	
To the book-keeper, $250 a year	2,562 50	
		16,812 50
Total		202,796 08

Yours, very truly,

JESSE SPALDING,
President

Col. D. C. HOUSTON,
United States Engineer, &c.

H.

STATEMENT IN DETAIL OF CASH ADVANCES BY STOCKHOLDERS IN 1872 AND 1873 TO THE STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL AND HARBOR COMPANY, AS APPEARING IN STATEMENTS F AND G.

Cash advances by stockholders of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, with interest on same to December 1, 1882.

Advanced by the Peshtigo Company, Chicago, Illinois.

Subscription to capital stock:			
1872.			
May 8. Cash assessment of 5 per cent. paid on 200 shares of capital stock		$1,000 00	$1,000 00
Cash loan of $26,785.69:			
1872.			
Oct. 7. Payment to William E. Strong, treasurer		2,383 26	
Nov. 9. Payment to William E. Strong, treasurer		8,960 55	
Dec. 7. Payment to William E. Strong, treasurer		8,741 60	
1873.			
Mar. 18. Payment to William E. Strong, treasurer		665 34	
Aug. 13. Payment to William E. Strong, treasurer		3,078 63	
Sept. 10. Payment to William E. Strong, treasurer		2,956 31	
Total loan			26,785 69
Examination of canal lands on the Peshtigo River:			
1872.			
Aug. 1. Labor, July, 27 days		$69 18	
Sept. 1. Labor, August, 229 days		607 12	
Oct. 1. Labor, September, 155 days		395 30	
Nov. 1. Labor, October, 32½ days		116 07	
Dec. 1. Labor, November, 56 days		192 12	
1873.			
Aug. 1. Examination of 20,000 acres canal lands in townships 32 and 33, range 19		450 00	
			1,829 79
Total cash advances as above			29,615 48
Interest on above advances to September 10, 1873:			
Interest on $26,785.69, loan, from date of advance to September 10, 1873, at 10 per cent	$1,739 32		
Interest on $1,829.79, examination lands, from dates given to September 10, 1873, at 10 per cent	136 82		
Total interest to September 10, 1873			1,876 14
Total			31,491 62
Less cash paid September 10, 1873			1 62
Balance principal and interest September 10, 1873			31,490 00
For this balance, $31,490, the Peshtigo Company received September 12, 1873, 314 9/10 shares of the capital stock of the canal company.			
September 10, 1873. Cash advances and interest to date, as per preceding statement			$31,490 00
Interest on same compounded annually to December 1, 1882:			
Interest on $31,490 from September 10, 1873, to December 31, 1873, 3 months and 20 days, at 10 per cent	$962 19		
Interest on $32,452.19 for year 1874, 12 months, at 10 per cent	3,245 22		
Interest on $35,697.41 for year 1875, 12 months, at 10 per cent	3,569 74		
Interest on $39,267.15 for year 1876, 12 months, at 9 per cent	3,534 04		
Interest on $42,801.19 for year 1877, 12 months, at 8 per cent	3,424 10		
Interest on $46,225.29 for year 1878, 12 months, at 8 per cent	3,698 02		
Interest on $49,923.31 for year 1879, 12 months, at 8 per cent	3,993 86		
Interest on $53,917.17 for year 1880, 12 months, at 7 per cent	3,774 20		
Interest on $57,691.37 for year 1881, 12 months, at 7 per cent	4,038 40		
Interest on $61,729.77 from January 1, 1882, to December 1, 1882, 11 months, at 6 per cent	3,395 14		
Total interest to December 1, 1882			33,634 91
Total principal and interest			65,124 91

Advanced by Jesse Spalding, Chicago, Illinois.

Subscription to capital stock:				
1872.				
May	8.	Cash assessment of 5 per cent. paid on 51 shares capital stock....		$255 00
		Cash loan of $10,732.55:		
1872.				
Oct.	7.	Payment to William E. Strong, treasurer	$995 40	
Nov.	9.	Payment to William E. Strong, treasurer	3,592 11	
Dec.	7.	Payment to William E. Strong, treasurer	3,504 34	
1873.				
Mar.	18.	Payment to William E. Strong, treasurer	266 72	
Aug.	13.	Payment to William E. Strong, treasurer	1,231 45	
Sept.	10.	Payment to William E. Strong, treasurer	1,182 53	
		Total cash loan		10,732 55
Examination of canal lands on the Menominee River:				
		One-half of bill for labor and supplies July, August, September, October, and November, 1872.....		471 81
		Total cash advances to September 10, 1873		11,459 36
Interest on above advances:				
		Interest on loan of $10,732.55 from date of advance to September 10, 1873, at 10 per cent	697 24	
		Interest on $471.81, examination of lands from dates to September 10, 1873, at 10 per cent	40 07	
		Total interest to September 10, 1873.....		737 31
		Total		12,196 67
Less cash paid September 10, 1873				6 67
Balance, principal and interest, September 10, 1873.....				12,190 00
For this balance Mr. Spalding received September 12, 1873, 121.9 shares of the capital stock of the company.				
September 10, 1873, cash advances and interest to date, as per preceding statement.....				12,190 00
Interest on same compounded annually to December 1, 1882:				
		Interest on $12,190 from September 10, 1873, to December 31, 1873, 3 months, 20 days, at 10 per cent.....	$372 48	
		Interest on $12,562.48 for year 1874, 12 months, at 10 per cent	1,256 25	
		Interest on $13,818.73 for year 1875, 12 months, at 10 per cent	1,381 87	
		Interest on $15,200.60 for year 1876, 12 months, at 9 per cent.	1,368 05	
		Interest on $16,568.65 for year 1877, 12 months, at 8 per cent.	1,325 49	
		Interest on $17,894.14 for year 1878, 12 months, at 8 per cent.	1,431 53	
		Interest on $19,325.67 for year 1879, 12 months, at 8 per cent.	1,546 05	
		Interest on $20,871.72 for year 1880, 12 months, at 7 per cent.	1,461 02	
		Interest on $22,332.74 for year 1881, 12 months, at 7 per cent.	1,563 29	
		Interest on $23,896.03 from January 1, 1882, to December 1, 1882, 11 months, at 6 per cent	1,314 23	
		Total interest to December 1, 1882.....		13,020 31
		Total principal and interest		25,210 31

Advanced by Isaac Stephenson, Marinette, Wisconsin.

Subscription to capital stock:				
1872.				
May	8.	Cash assessment of 5 per cent. paid on 51 shares capital stock of company.....		$255 00
		Cash loan of $10,732.55.		
1872.				
Oct.	7.	Payment to William E. Strong, treasurer.....	$955 40	
Nov.	9.	Payment to William E. Strong, treasurer.....	3,592 11	
Dec.	7.	Payment to William E. Strong, treasurer.....	3,504 34	
1873.				
Mar.	18.	Payment to William E. Strong, treasurer.....	266 72	

Aug. 13. Payment to William E. Strong, treasurer		$1,231 45	
Sept. 10. Payment to William E. Strong, treasurer		1,182 53	
Total loan			$10,732 55
Examination of canal land, Menominee River:			
One-half of bill for labor and supplies furnished July, August, September, October, and November, 1872			471 82
Total cash advances to September 10, 1873			11,459 37
Interest on above advances:			
Interest on cash loan $10,732.55 to September 10, 1873, at 10 per cent	$697 24		
Interest on $471.81, examining lands to September 10, 1873, at 10 per cent	40 06		
Total interest to September 10, 1873			737 30
Total			12,196 67
Less cash paid September 10, 1873			6 67
Balance, principal and interest September 10, 1873			12,190 00
For this balance, $12,190, there was issued September 12, 1873, 121.9 shares of the capital stock of company:			
September 10, 1873, cash advances and interest to date, as per preceding statement			$12,190 00
Interest on same compounded annually to December 1, 1882:			
Interest on $12,190 from September 10, 1873, to December 31, 1873, 3 months, 20 days, at 10 per cent	$372 48		
Interest on $12,562.48 for year 1874, 12 months, at 10 per cent	1,256 25		
Interest on $13,818.73 for year 1875, 12 months, at 10 per cent	1,381 87		
Interest on $15,200.60 for year 1876, 12 months, at 9 per cent	1,368 05		
Interest on $16,568.65 for year 1877, 12 months, at 8 per cent	1,325 49		
Interest on $17,894.14 for year 1878, 12 months, at 8 per cent	1,431 53		
Interest on $19,325.67 for year 1879, 12 months, at 8 per cent	1,546 05		
Interest on $20,871.72 for year 1880, 12 months, at 7 per cent	1,461 02		
Interest on $22,332.74 for year 1881, 12 months, at 7 per cent	1,563 29		
Interest on $23,896.03 for year 1882, from January 1 to December 1, 11 months, at 6 per cent	1,314 28		
Total interest to December 1, 1882			13,020 31
Total principal and interest			25,210 31

Advanced by F. B. Gardner.

Subscription to capital stock:

1872.			
May 8. Cash assessment of 5 per cent. paid on 51 shares capital stock			$255 00
Cash loan of $10,732.55:			
Oct. 7. Payment to William E. Strong, treasurer		$955 40	
Nov. 9. Payment to William E. Strong, treasurer		3,593 11	
Dec. 7. Payment to William E. Strong, treasurer		3,504 34	
1873.			
Mar. 18. Payment to William E. Strong, treasurer		266 72	
Aug. 13. Payment to William E. Strong, treasurer		1,231 45	
Sept. 10. Payment to William E. Strong, treasurer		1,182 53	
Total			10,732 55
Examination of canal lands on Pensaukee River:			
Labor and supplies furnished October and November, 1872			303 15
Total cash advances to September 10, 1873			11,290 70

Interest on above advances:		
Interest on cash loan of $10,732.55 from date to September 10, 1873, at 10 per cent	$697 24	
Interest on $303.15, examination of land from date to September 10, 1873, at 10 per cent	23 49	
Total interest to September 10, 1873		$720 73
Total		12,011 43
Less cash paid September 10, 1873		1 43
Balance principal and interest September 10, 1873		12,010 00

This balance, $12,010, was paid by issue September 12, 1873, of $120\frac{1}{10}$ shares of the capital stock of company.
This stock was sold and transferred December 11, 1875, to Mr. William B. Ogden.

Estate of William B. Ogden.—Continuation of account of F. B. Gardner.

September 10, 1873, cash advances by F. B. Gardner, with interest to date as per preceding statement:		
Stock received in settlement purchased by Mr. William B. Ogden December 11, 1875		$12,010 00
Interest on same compounded annually to December 1, 1882:		
Interest on $12,010 from September 10, 1873, to December 31, 1873, 3 months, 20 days, at 10 per cent	$366 97	
Interest on $12,376.97 for year 1874, 12 months, at 10 per cent	1,237 70	
Interest on $13,614.67 for year 1875, 12 months, at 10 per cent	1,361 47	
Interest on $14,976.14 for year 1876, 12 months, at 9 per cent	1,347 85	
Interest on $16,323.99 for year 1877, 12 months, at 8 per cent	1,305 92	
Interest on $17,629.91 for year 1878, 12 months, at 8 per cent	1,410 39	
Interest on $19,040.30 for year 1879, 12 months, at 8 per cent	1,523 22	
Interest on $20,563.52 for year 1880, 12 months, at 7 per cent	1,439 45	
Interest on $22,002.97 for year 1881, 12 months, at 7 per cent	1,540 21	
Interest on $23,543.18 for year 1882, from January 1, 1882, to December 1, 1882, 11 months, at 6 per cent	1,294 87	
Total interest to December 1, 1882		12,828 05
Total principal and interest		24,838 05

Summary of cash advances by stockholders, with interest to December 1, 1882, as per statements.

Due the Peshtigo Company	$65,124 91
Due Jesse Spalding	25,210 31
Due Isaac Stephenson	25,210 31
Due estate of William B. Ogden	24,838 05
Total	140,383 58

We certify that the foregoing statement is true to the best of our knowledge and belief.

JESSE SPALDING,
President.
WILLIAM E. STRONG,
Treasurer.

I.

Statement showing transit of vessels through the Sturgeon Bay and Lake Michigan Ship-Canal, during seasons of 1879, 1880, 1881, *and* 1882, *to October* 1.

Month of—	Season of 1879.		Season of 1880.		Season of 1881.		Season of 1882.	
	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
		Tons.		*Tons.*		*Tons.*		*Tons.*
March	.....	.....	.....	.....	.....	.....	16	2,525
April	.....	.....	12	1,870	15	3,253	154	44,172
May	.....	.....	27	3,777	108	25,605	286	75,927
June	3	51	32	4,907	251	60,070	443	108,243
July	13	182	81	16,251	283	74,756	385	99,967
August	(*)	(*)	103	22,410	190	67,794	440	107,934
September	22	4,213	95	21,157	192	46,743	482	106,434
October	62	13,647	104	23,931	251	66,995	.....	.....
November	60	13,978	79	19,076	190	57,186	.....	.....
Total	160	32,071	533	113,379	1,480	402,402	2,206	545,202

* None reported.

SUMMARY.

Period.	Vessels.	Tonnage.
During season of 1879	160	32,071
During season of 1880	533	113,379
During season of 1881	1,480	402,402
During season of 1882	2,206	545,202
Total	4,379	1,093,054

We hereby certify that the foregoing statement is correct to the best of our knowledge and belief.

JESSE SPALDING, *President.*
WILLIAM E. STRONG,
Treasurer and Assistant Secretary.

K.

STATEMENT SUPPLEMENTARY TO STATEMENT I.

LETTER OF MR. WILLIAM E. STRONG.

OFFICE OF THE PESHTIGO COMPANY,
MANUFACTURERS OF LUMBER, LATH, &C.,
Chicago, December 16, 1882.

DEAR SIR: The tonnage of vessels using the canal during the month of November, 1882, amounted to 96,000. The total tonnage using canal for the present season amounted to 741,921 tons, against 402,402 tons for 1881.

Yours, very truly,

WILLIAM E. STRONG.

Col. D. C. HOUSTON,
United States Engineers.

LETTER OF THE PRESIDENT OF THE STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL AND HARBOR COMPANY.

CHICAGO, ILL., *November* 10, 1882.

GENTLEMEN: I have the honor to submit the following statement of the transit of vessels through the Sturgeon Bay and Lake Michigan Ship-Canal during the year 1882, viz:

	No. of vessels.	Tonnage.
For the month of October, 1882	440	100,719
Total number and tonnage to November 1, 1882	2,646	645,921
Estimated number and tonnage for month of November, 1882	355	80,000
Aggregate for 1882	3,001	725,921

I am, very respectfully,

JESSE SPALDING,
President Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company.

Col. D. C. HOUSTON and Maj. H. M. ROBERT,
United States Corps of Engineers.

EXHIBIT B.—FINANCIAL STATEMENT OF THE CANAL COMPANY.

Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company receipts and disbursements from October 10, 1882, *to October* 1, 1886.

RECEIPTS.

Cash on hand October 10, 1882, as per report to Congressional committee		$22,161 86
Received from land grant:		
Collections on contracts for lands sold:		
From October 10, 1882, to December 31, 1882	$273 78	
From January 1, 1883, to December 31, 1883	380 26	
From January 1, 1884, to December 31, 1884	94 00	
		748 04
Collection of amount advanced on land contract:		
Notes sold and payment guaranteed at maturity.		
On October 10, 1882, company had advanced	393 27	
Interest collected on past due payments	52 30	
		445 57
Revenue from canal, collection of canal tolls, &c:		
From October 10, 1882, to December 31, 1882	8,643 84	
During the year 1883	21,495 35	
During the year 1884	17,734 15	
During the year 1885	17,384 24	
From January 1, 1886, to October 1, 1886	8,085 83	
Total from canal		73,343 41
Miscellaneous receipts:		
Received in 1883 from sale of stove, desk, &c., used in land commissioner's office, Milwaukee		38 92
Total for disbursements		96,737 80

Disbursements from October 10, 1882, *to October* 1, 1886.

Expense of operating and repairs to canal from September 1, 1882, to October 1, 1886.

Charter of tug towing through canal:		
From September 1, 1882, to December 1, 1882, tow-bills reverting to canal company, 88¼ days, at $50	$4,437 50	
Season of 1883, charter, including tow-bills	890 00	
Season of 1884, charter, including tow-bills	1,000 00	
Season of 1885, charter, including tow-bills	1,000 00	
Season of 1886, payable in December	1,000 00	
Total chartered tug		7,327 50
Salaries of superintendent and assistants:		
Superintendent:		
1882, September 1 to December 31, 4 months, at $150	$600 00	
1883, 12 months, at $150 and $100	1,350 00	
1884, 12 months, at $100	1,200 00	
1885, 12 months, at $100	1,200 00	
1886, to October 1, 9 months	900 00	
Collector and office clerk:		
1882, September 1 to December 5, at $45	133 50	
1883, April to December 14, at $45 and $50	396 34	
1884, April to December 23, at $50	438 33	
1885, April to December 31, at $50	445 96	
1886, January 1 to October 1, 9 months, at $500 per year	374 98	
Watchman (night):		
1882, from September 1 to November 1, at $40	120 00	
1883, from April to December 1, at $40 and $45	368 13	
1884, from April to December 15, at $40	338 67	
1885, April to December 6, at $40	293 66	
1886, April to October 1	226 32	
Total superintendent and assistants		8,385 89
Incidental expenses: Oil, fuel, blank books, stationery, printing, postage, &c.:		
From September 1 to December 31, 1882	$138 64	
For year 1883	418 80	
For year 1884	282 09	
For year 1885	258 28	
From January 1 to September 30, 1886	130 52	
Total incidental expense		1,228 33
Repairs to canal, dredging, &c.:		
Brush revetment:		
Labor and material:		
1882	307 07	
1883	30 75	
1884	6 48	
1885	384 18	
1886 to October 1	226 85	
General repairs to docks, &c.:		
Labor and material:		
1882	38 00	
1883	183 21	
1884	447 66	
1885	121 43	
1886 to October 1	202 37	
Total on repairs		1,948 00
Dredging:		
1882, removing 1,564 yards, at 15 cents	234 60	
1883, removing 7,557 yards, at 25 cents	1,889 25	
1883, wages of inspector	155 06	
1884, 72 hours' dredging and use of tug towing and attending dredge	727 50	
Total dredging		3,006 41
Total canal operating account		21,896 13

Land commissioner's office, Milwaukee, expense attending sale of land grant from August 1, 1882, to May 1, 1883 (close of office at Milwaukee):		
Salary of land commissioner from August 1, 1882, to May 1, 1783 (nine months), at $125 per month	$1,125 00	
Extra clerk (one month), January, 1883	83 33	
Office rent, board, traveling, office and incidental expenses for nine months	249 19	
Total expense land department		$1,457 52
Settlement of accounts:		
Cash paid November 23, 1882, on settlement of personal accounts for interest and services, being fractional portions of one share of stock on six settlements. (The amounts were settled by the issue of full-paid stock in shares of $100 each and cash for balance.) Cash so paid		216 08
General expense account:		
Traveling expenses, legal services, office and incidental expenses paid between the date of October 10, 1882, and October 1, 1886		1,528 21
Taxes on right of way and unsold lands:		
Tax paid for 1882, 1883, 1884, 1885 on right of way	$991 94	
Highway tax for 1882, 1883, 1884, 1885	319 00	
Real estate tax on unsold lands reverting to canal company by forfeiture (120 acres)	23 36	
Total tax paid		1,334 30
Surplus account:		
Surplus and earnings over expenses divided among the stockholders of the company:		
December 22, 1882	$12,578 00	
December 21, 1883	21,488 00	
December 22, 1884	17,190 40	
December 19, 1885	12,892 80	
Total paid in dividends	64,149 20	
Total disbursements from October 10, 1882, to October 1, 1886.	90,581 44	

SUMMARY OF RECEIPTS AND DISBURSEMENTS.

Receipts, as per statement folio	$96,737 80
Disbursements, as above	90,581 44
Cash on hand October 1, 1886	6,156 36
Resources of canal October 1, 1886:	
Cash in Commercial National Bank	6,156 36
Uncollected bills for canal tolls prior to season 1886 (doubtful)	235 31
For season 1886, including September accounts	4,161 22
Unsold lands reverting to company from forfeiture of constracts, 160 acres. These lands have but little value, the company having had no offer for them; estimated at, say	160 00
Resources, exclusive of canal	10,712 89

We hereby certify that the above statements are true and correct to the best of our knowledge and belief.

JESSE SPALDING,
President.
WM. E. STRONG,
Assistant Secretary and Treasurer.

Comparative statement of tonnage through canal for seasons of 1882, 1883, *and* 1884, *and including month of September of season of* 1886.

Month.	1882.		1883.		1884.		1885.		1886.	
	Trips.	Tonnage.	Trips.	Tonnage.	Trips.	Tonnage.	Trips.	Tonnage.	Trips.	Tonnage.
March	16	2,525	.....	.....	.....	.....	.....	.....	.....	.....
April	154	44,172	64	14,727	173	19,627	24	1,207	82	14,387
May	286	75,927	347	76,280	531	101,984	461	74,034	289	55,260
June	443	108,243	435	97,512	547	71,806	436	79,463	370	65,093
July	385	99,967	393	95,485	611	93,997	483	83,196	366	73,088
August	440	107,934	365	101,628	544	84,027	539	90,908	431	82,907
September	482	106,434	411	108,149	588	95,933	578	97,545	466	85,400
October	440	101,186	477	129,132	631	103,282	585	100,102	.....	.....
November	392	96,984	347	84,493	459	68,596	593	104,129	.....	.....
December	12	1,756	22	3,872	17	1,470	24	3,922	.....	.....
Total trips	3,050	.....	2,861	.....	4,101	.....	3,723	.....	2,004	.....
Total tonnage.	.....	745,128	.....	711,478	.....	640,722	.....	634,506	.....	376,605

We hereby certify that the above statement is true and correct to the best of our knowledge and belief.

JESSE SPALDING,
President.
WM. E. STRONG,
Assistant Secretary and Treasurer.

EXHIBIT C.—STATEMENT OF CAPITAL STOCK AND INDEBTEDNESS OF THE CANAL COMPANY.

OFFICE OF THE STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL AND HARBOR COMPANY,
Chicago, October 18, 1886.

DEAR SIR: In compliance with the request contained in the letter from Capt. W. L. Marshall, I herewith submit the accompanying statements giving the information asked for.

Yours, respectfully,

JESSE SPALDING,
President.

Lieut. Col. WM. P. CRAIGHILL,
U. S. Corps of Engineers.

The bonded indebtedness of the company.—There is no bonded indebtedness.

The capital stock of the company.—The capital stock authorized by the act of incorporation was $250,000. The amount of stock actually issued, as per statement of stockholders, is $214,880.

The floating indebtedness of the company.—The canal company has paid all indebtedness where an account has been rendered for the same, including salary and expense of the canal superintendent to October 1, 1886. The only unpaid indebtedness of any amount is the sum due the owners of the tug Spalding, on charter for towing vessels through the canal, not payable until the close of the season of navigation (December), and amounting to $1,000.

The stockholders of the company.

Names.	Shares.	Amount.
The Peshtigo Company	862.9	$86,290
Jesse Spalding	433.9	43,390
Estate of William B. Ogden	348.1	34,810
Isaac Stephenson	211	21,100
The N. Ludington Company	120.9	12,090
Joseph Harris	101	10,100
William E. Strong	40	4,000
George C. Hempstead	25	2,500
Mrs. Marie V. D. Casgrain	24	2,400
Edwin H. Sheldon	1	100
Estate of Charles D. Robinson	1	100
Total	2,148.8	214,880

Total issued October 1, 1886, 2,148.8 shares, at $100.

The above stock has been issued as follows:

(1) For cash:		
Payments on stock subscribed for	$2,365 00	
Settlement of cash loans 1872–'73	62,814 38	
Settlement of advances, examining lands	3,300 62	
		$68,480 00
(2) Interest on loans and advances from September 10, 1873, to December 1, 1882		72,400 00
(3) Services:		
To directors	$40,000 00	
To officers and clerical services	22,000 00	
To the Peshtigo Company	12,000 00	
		74,000 00
Total as above		214,880 00

(1) The $68,480 was paid for in full in cash at par.

(2) The $72,400 of stock has had no calls made upon it, nor has there been any cash payments on it.

(3) The $74,000 was issued at different times by vote of the board of directors to the directors and officers and to The Peshtigo Company for services covering a period of over fourteen years. If the transaction, which was made without the advice of counsel, is not sustainable in law, then the stock is to be considered as paid only to the extent of the value of the services.

We hereby certify that the above statements are true to the best of our knowledge and belief.

JESSE SPALDING,
President.
WM. E. STRONG,
Assistant Secretary and Treasurer.

EXHIBIT D.—COPY OF THE ACT OF THE LEGISLATURE OF THE STATE OF WISCONSIN, APRIL 24, 1864, INCORPORATING THE CANAL COMPANY.

LAWS OF THE STATE OF WISCONSIN, PUBLISHED APRIL 23, 1864.

CHAPTER 365.—An act to incorporate the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company.

The people of the State of Wisconsin, represented in senate and assembly, do enact as follows:

SECTION 1. William B. Ogden, Freeland B. Gardner, Thomas H. Beebe, Jesse Spalding, and A. E. Goodrich, of the city of Chicago; Alexander Mitchell, Anson Eldred, and Daniel Wells, of the city of Milwaukee; Joseph Harris and George Bennett, of Sturgeon Bay; A. P. Lyman, of Sheboygan; Charles D. Robinson, Henry S. Baird, George Strong, Andrew E. Elmore, H. E. Waring, James S. Baker, and F. R. Schet-

tler, of the city of Green Bay; W. M. Whitcomb and Uri Balcom, of Oconto; Edward C. French, of Peshtigo; Andrew Reid, of Depere; Richard S. Fay, of Boston, Mass.; George P. Smith, of Philadelphia, Pa.; Elisha Riggs, of Washington, D. C.; J. D. Spingelberg and David Magie, of New York; Elias Gill, of Hartford, Conn., and William G. McMasters, of Lockport, N. Y., and their associates, successors, and assigns, be, and they are hereby created and declared to be a body-politic and corporate under the name and style of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, and under and by that name they and their successors shall have succession, and shall have and enjoy all the privileges, franchises, and immunities incident to a corporation. They shall be capable in law of purchasing, holding, selling, leasing, and conveying estates, either real, personal, or mixed, and may take and hold such estate by gift, grant, purchase, devise, or lease. They may make, have, and use a common seal, and alter the same at pleasure; and by that name may sue and be sued, plead and be impleaded, answer and be answered, defend and be defended, contract and be contracted with, and, generally, do and perform all the acts and things which to said corporation it shall lawfully appertain to do and perform.

SEC. 2. The capital stock of said company shall be two hundred and fifty thousand dollars, which shall be divided into such number of shares and of such amounts as the directors shall determine, and the directors shall cause books to be opened at such times and places as they may designate, giving ten days' notice thereof in a newspaper printed in the city of Green Bay, in the village of Oconto, and at Sturgeon Bay, in Door County, and the directors shall determine and publish in the aforesaid notice the amount to be paid at the time of subscribing on each share of stock subscribed.

SEC. 3. William B. Ogden, Freeland B. Gardner, Thomas H. Beebe, Joseph Harris, George Bennett, Alexander Mitchell, Charles D. Robinson, H. S. Baird, W. M. Whitcomb, Anson Eldred, and Andrew Reid shall be the first directors. They shall elect one of their number president, and shall hold their offices until other directors are duly elected and qualified.

SEC. 4. The affairs and business of said company shall be managed by a board of eleven directors, who shall be stockholders, and the board of directors are hereby invested with all the power of the corporation. They shall be chosen annually by ballot at the annual meetings of the stockholders, which shall be held at such time and place as the directors shall from time to time prescribe, and the same notice of every such election shall be given as is herein required to be given of the first election of directors. The directors shall be elected by the stockholders, and at such elections and at all meetings of the stockholders the votes shall be delivered in person or by proxy, duly authorized, and every stockholder shall be entitled to one vote for each share of stock by him held; and at all elections for directors, those stockholders equal to the number of directors to be elected, having the greatest number of votes, shall be deemed and declared duly elected. The elections shall be conducted in such manner as shall be prescribed by the by-laws of the company if for any cause an election of directors should not be had at the time when by the provision of this act it should be had, the same may be had at any other time on thirty days' notice being given as aforesaid, and until such election be had, the directors of the preceding year shall continue to act, and the corporation hereby created shall not forfeit or lose any of its privileges, franchises, or immunities by reason of the irregularity or want of any such election.

SEC. 5. A majority of the board of directors shall constitute a quorum for the transaction of business. They shall meet at such times and places and be convened in such manner as they shall decide upon. They shall appoint one of their number to be president, who shall serve for one year, or if from any cause there be a vacancy in the office of president, the same shall be filled by election, as herein provided. The president, when present, shall preside at all meetings of the directors and stockholders, and in case of his absence the directors present may appoint a president *pro tempore*. The directors shall have power to reopen the books for subscription to the capital stock of the company under the direction of such person or persons as they may designate. They shall determine the amount of installments to be paid from time to time in such subscriptions, and (have power) to forfeit to the use of the company the share or shares of any persons failing to pay any installments, as also any previous payments thereon.

SEC. 6. The said company is hereby authorized and empowered, in its corporate capacity, to borrow any sum or sums of money from any person or persons, corporation or body politic of any kind, bearing interest not to exceed the rate of 10 per cent. per annum, and to make, execute, and deliver in and out of the State, all necessary writings, notes, bonds, mortgages, or other papers or securities, in amount or kind, as may be deemed expedient by such corporation, in consideration of any such loan, or in discharge of any liabilities that it may incur in the construction, repair, equipment or care and use of said canal, and to make, execute, sell, and deliver at private or public sale in or out of the State, bonds, in such sums and in such amounts, payable at such times, and bearing a rate of interest not exceeding 10 per cent. per annum, secured by a mortgage on the whole or any part of the canal of this company, with its equipments,

fixtures, and appurtenances, and the power of the said corporation for the purpose aforesaid, and for all purposes necessary to carry out the objects of said company, are hereby ratified and confirmed, and the contracts and official acts of said company declared binding in law.

SEC. 7. The said company shall have power to locate, construct, and build a canal of such width, depth, and dimensions as they shall deem proper and expedient for all classes of shipping in the lakes, between the head of Sturgeon Bay, in the county of Door, and Lake Michigan, so as to connect the waters of said bay with said lake, and to construct a breakwater and harbor on the lake shore at the mouth of said canal, and to dredge and improve the sand bar so as to make a convenient and safe anchorage and harbor in said Sturgeon Bay.

SEC. 8. The directors shall have power to regulate tolls and charges upon all boats, vessels, steamboats, and other craft used for the transportation of freight and passengers on and along the canal of said company, and for the use of any steam tugs owned by said company, and to make such covenants, contracts, and agreements with any person or persons, copartnership, or corporation whatever, as the execution and management of the business and the convenience and interest of the company may require; to make and establish such by-laws, rules and regulations, and orders, not inconsistent with the Constitution and laws of the United States or of this State, as they shall think proper for the well ordering of the affairs of the company, and the same from time to time to alter, amend, or repeal, and shall also appoint a secretary and treasurer and such other officers as they may deem necessary, and impose upon them such duties as they may deem proper, to remove either of said officers and appoint others in their stead, and fix the compensation of said officers, and to require such security for the proper discharge of their duties as they may judge necessary; to fill all vacancies occurring in the board of directors; to give proper certificates of stock to the stockholders, signed by the president and secretary; to acquire, accept by grant, gift, or bequest, purchase, sell, lease, and dispose of real and personal estate in the name and for the use of the company; to establish and construct piers, docks, depots, and all other necessary structures, fixtures, machinery, and apparatus; to order and cause to be made all surveys, estimates, and letting of work; to prescribe such form of contract, rules, regulations, specifications for the performance of the work as may be by them deemed proper; to hold, sell, lease, and occupy any lands, depots, toll-houses, warehouses, machine-houses, structures, fixtures, apparatus, or machinery, granted to or owned by said company; to make, construct, and keep in repair the canal, harbors, and other improvements of said company; and to build or contract for steam-tugs for the use of the company. They shall have power to make and declare a dividend of profits and income of said business, lands, improvements, and appurtenances, among the stockholders equally upon the stock held by each, at such time as they may determine, and, generally, to do all and every necessary and proper act in accordance with the fair intent and meaning of this act.

SEC. 9. On the completion of said canal it shall and may be lawful for the company to demand and receive such sums of money for the storage of property in any depot or warehouse of said company as they shall from time to time think reasonable.

SEC. 10. If any person shall wilfully or knowingly injure or destroy any part of the canal, buildings, docks, steam-tugs or other works so to be constructed by said company, such person or persons so offending shall each of them for every offense forfeit and pay to said company a sum equal twice the amount of damages caused by such offense, which may be received in the name of said company by action of debt in any court having competent jurisdiction in the county where the offense shall be committed, and shall also be deemed guilty of a misdemeanor, and be subject to indictment, and upon conviction of any such offense shall be punished by fine and imprisonment, or either, at the discretion of the court.

SEC. 11. The first meeting of the directors, and of the stockholders of the said company shall be called by at least a majority of the directors named in this act. A concurrence of a majority of the directors shall be necessary in order to adopt, establish, alter, modify, amend, rescind, or abolish any regulation or by-law of said company.

SEC. 12. Chapter one hundred and twenty-nine of the private and local laws of 1856, and chapter two hundred and thirty-seven of the private and local laws of 1858, are hereby repealed.

SEC. 13. This act is hereby declared to be a public act, and shall be favorably construed to effect the purposes herein intended, and copies thereof printed by authority of the State, shall be received as evidence thereof in all cases.

SEC. 14. This act shall take effect and be in force from and after its passage and publication.

Approved April 2, 1864.

EXHIBIT E.—STATE ACT 1873 AMENDING STATE ACT APRIL 24, 1864.

CHAPTER 89.—An act to amend chapter 365 of the laws of Wisconsin, approved April 24, 1864, entitled an act to incorporate the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, and chapter 105 of the general laws of 1868, entitled an act to accept the grant of land made to the State of Wisconsin by Congress to aid in the construction of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor, in the county of Door, to connect the waters of Green Bay with Lake Michigan, and to provide for the construction of the same, approved March 5, 1868.

Whereas, by three hundred and sixty-five of preamble, the laws of Wisconsin of 1864, approved April 24, 1864, the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company was made a body corporate, with power to borrow money on notes, bonds, mortgages, or other papers or securities, and were empowered to proceed to locate, construct and build a ship-canal in Door County, Wisconsin, between the head of Sturgeon Bay and Lake Michigan, connecting the waters of said bay with said Lake Michigan, and to construct a breakwater and harbor on the lake shore at the mouth of said canal; and by section 8 and subsequent sections of said act of incorporation above mentioned, said company, by its directors, were authorized and empowered, among other things, to regulate tolls and charges to be made upon all boats, vessels, steamboats, and other craft used for the transportation of freight and passengers on and along the canal of said company so proposed to be built, and yet were not in express language empowered to mortgage said canal and the net tolls and income thereof, to raise the money necessary for its construction, to which capitalists, having money to loan, make objection, as not being sufficiently definitive and certain; and

Whereas, subsequently the Congress of the United States passed an act, approved April 10, 1866, which act granted to the State of Wisconsin, for the purpose of aiding said State in constructing and completing a breakwater and harbor and ship-canal to connect the waters of Green Bay with the waters of Lake Michigan, 200,000 acres of public lands, and which said act further declared that the said lands hereby granted shall be subject to the disposal of the legislature of said State, for the purposes aforesaid and for no other; and

Whereas the State of Wisconsin, by chapter 105, approved March 5, 1868, entitled an act to accept the grant of lands made to the State of Wisconsin by Congress to aid in the construction of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor, in the county of Door, to connect the waters of Green Bay and Lake Michigan, and to provide for the construction of the same, did thereby accept said lands so granted by Congress, and did declare, by section 2 of said act, that for the purposes of carrying out the objects of said act, the said lands are hereby granted and conferred upon the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company; and

Whereas said lands so granted were required by Congress to be selected from the public lands nearest to said canal, and from which the best selections of public lands had already been made years before; and

Whereas, in consequence of very extensive trespasses committed through years past upon said lands so selected, estimated to amount in all to about 100,000,000 of feet of the best pine timber upon them; and in consequence of the unprecedented fires of October, 1871, which destroyed so large a portion of the remaining pine and other timber upon said lands, their value has been greatly reduced and cannot now be estimated or valued at more than $150,000 for 200,000 acres of land, if as much, which sum is wholly inadequate to the cost of constructing said canal, said cost being officially reported to the Secretary of War in 1871, after a very careful, complete, and accurate survey by Government engineers, to be on the cheapest line and route. From this sum, however, there may be deducted as follows, to wit:

Estimated cost		$629,300
Deductions:		
1. The estimated cost of a perishable timber revetment on the sides of said canal not needed for years to come, if at all	$144,400	
2. The net amount already received from timber trespasses and for burned and down timber sold over costs of collection and over costs of protection of said canal lands, as audited and settled by the State	23,240	
3. The present full value of the 200,000 acres of land granted by Congress, after the damages committed by trespass and by fire	150,000	
		317,240
Still leaving to be provided, to insure the completion of said canal, the sum of		312,060

To this sum must be added provisions for the expenses of preparing the mortgage and bonds proposed to be made and issued, and the expenses and commissions to be paid to effect the sale of the same, and the possible discount from par that it may be necessary to make, to effect the sale thereof in the money market, together with the interest that will accrue on a portion of the bonds sold pending the construction of said canal, amounting in all probability to $50,000; but to reduce these expenses to the minimum, and to limit the proposed mortgage or deed of trust on said canal to the sum of $350,000, and the interest thereon, call these items but.....	$37,940
And it leaves to be provided by mortgage trust on canal income.....	350,000

Which mortgage of $350,000 is the estimated amount necessary to be issued and used by said canal company in order to complete said canal, and which said mortgage and the bonds to be issued in connection therewith, said company respectfully ask of the legislature the power, in express language, to secure upon said Sturgeon Bay and Lake Michigan Ship-Canal and Harbor, and the net tolls and income thereof, and upon the lands granted by Congress to aid in its construction until the same is fully repaid, with interest as in said mortgage and bonds to be provided, which legislation is also solicited and deemed expedient in order to remove the apprehensions and obstacles which capitalists might otherwise find to the purchase of said bonds at their full value in the market; and

Whereas the extension by Congress of the time for the completion of said canal expires on the 10th of April, 1874, leaving but one, the coming season, in which to complete the same before the land grant for its aid expires, and is withdrawn; and

Whereas said Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company have, within the past year, accomplished about one-fourth part of the work of constructing said canal, and are now ready and desirous, with the proper and necessary legislative provisions and aid, to more definitely and conclusively arrange with the State of Wisconsin for the completion by said company of said canal (to the great benefit and relief of the increasing commerce of Green Bay and the lakes), by taking the aforesaid 200,000 acres of land granted in aid of said canal in part payment therefor, the same to be conveyed from time to time by patents to said company as the work progresses, as such conveyance is now provided for in section 4 of chapter 105 of the laws of 1868, hereinbefore mentioned and referred to, and also by said company's being authorized by the State to execute in addition, in order to provide funds for the balance of the further estimated cost of construction of said canal, a mortgage deed of trust upon said Sturgeon Bay and Lake Michigan Canal and Harbor, and the net tolls and income thereof, and also upon any part of all of said lands granted by Congress as aforesaid for said $350,000, the same and the bonds in like amount to be issued in connection therewith, and to be secured thereby, to be and remain a lien upon said canal and harbor and upon the said lands and the net tolls and income of said canal until said bonds and the interest thereon as provided in said bonds and mortgage shall have been fully paid by the proceeds of the income of or by the sale of said canal lands or otherwise. Beyond such authority of the State to said company to so mortgage and pledge said canal lands, and the income thereof, the said State of Wisconsin is, however, in nowise or in any way to be held or made liable for the payment of principal or interest of said bonds, nor is recourse to be had to said State in any way for or on account of said canal, or any liability thereof. Now, therefore,

The people of the State of Wisconsin, represented in senate and assembly, do enact as follows:

SECTION 1. The Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, made a body corporate by chapter 365 of the laws of 1864, approved April 24, 1864, and now legally organized and engaged in carrying out the objects of its incorporation under said law, and the franchises, powers, and privileges by said act granted and conferred upon said company, and all of which said franchises, rights, powers, and privileges are hereby declared to be extended and continued to said company the same as originally conferred upon it by said act, and in order the better to enable said company promptly to proceed with the work of said canal, it is (they are) hereby authorized and empowered to make and execute a deed of trust or mortgage, with such provisions and conditions therein as they shall deem proper, and to issue bonds to be secured by said mortgage for any sum not exceeding $350,000, and are authorized to secure said deed of trust or mortgage and the bonds issued in connection therewith upon the said Sturgeon Bay and Lake Michigan Ship-Canal and Harbor, and upon the net tolls, revenues, and income thereof, and also upon any part or all of the lands heretofore granted by Congress to the State of Wisconsin for the purpose of aiding said State in constructing and completing a breakwater and harbor and ship-canal to connect the waters of Green Bay at the head

of Sturgeon Bay with the waters of Lake Michigan: *Provided*, That said mortgage shall not be or become a lien or incumbrance upon the lands above mentioned, or in any manner affect or impair the right, title, or interest of the State of Wisconsin thereto or therein, except and until the said canal, or parts of it, is constructed as required by existing laws in relation thereto: *And provided further*, That whenever one-fourth, or one-half, or three-fourths part of the work of construction of said canal is performed by said company, or whenever they shall have completed the whole of said canal, the one-fourth, one-half, three-fourths, or the whole of said lands, as the case may be, shall be conveyed to said company by the State of Wisconsin, or its proper officers as now provided by law, and when so conveyed, the same, or any portion thereof shall thereafter be and become subject to any mortgage or deed of trust said Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company shall already have executed, or may thereafter execute or cause to be executed thereon, or on any portion thereof, for the better securing thereby of any bonds that may be issued by said company in connection with said mortgage, and to the extent and in the manner provided for in any such mortgage or deed of trust, and any mortgage or deed of trust which said company shall think proper or necessary for them to execute in aid of the construction of said canal, prior to the time of the construction of any part or of the whole of said canal, shall be and become a lien on said lands and canal, and on the net tolls and income thereof, as said work progresses or is completed as is herein provided, and not ohterwise.

SEC. 2. The bonds to be issued by said company under and in accordance with and to be secured by the mortgage or deed of trust of said company above mentioned may be issued in sums of not less than one hundred nor more than one thousand dollars, may draw such interest, not exceeding 10 per cent. per annum, payable semi-annually, as said company may determine upon, and may be sold and disposed of by said company at, above, or below par, in their discretion, in aid of the construction and completion of said canal and harbor. And in case said company shall fail to sell or otherwise dispose of said bonds satisfactorily, in time to complete and finish said canal and harbor as herein provided for, they may, but shall not be required hereby, to so complete the same.

SEC. 3. This act shall be published, and take effect immediately.

Approved March 5, 1873.

EXHIBIT F.—COMMISSIONERS' APPRAISAL OF LAND GRANT, 1874.

To the honorable the commissioners of school and university lands, Madison, Wis.:

At the last session of the Wisconsin legislature the following joint resolution was passed:

"Joint resolution No. 36, A.

"*Resolved by the assembly* (*the senate concurring*), That the school-land commissioners are hereby authorized and directed, whenever application is made to them by said Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, so to adjust all differences now existing respecting a division of the land grant and the delivery of a deed of one-quarter in value of the same to said company as will substantially do justice both to the State and the canal company, and to that end to name a commissioner to appraise said land, in connection with a commissioner to be named by the canal company, which commissioners thus named shall fix a value to all such lands by sections and fractional sections, from the best evidence to be obtained without a personal examination of the land, and from such evidence the commissioners so appointed shall classify the lands into four classes as to value, and after such classification shall have been made, the canal company shall have the right to select from any or all the four classes an amount of land equal to one-quarter of the value of the whole amounts thus valued, and in case the two commissioners so appointed shall fail to agree upon the value of any of the land, the school and land commissioners shall decide the disputed question, and when the commissioners shall have so appraised the lands and so classified the same, and the canal company have made such selections, and certified the same to said school-land commissioners, then the school-land commissioners shall deed to said canal company the said land so selected by it. The compensation of the examining commissioners shall be determined and paid by said canal company.

"Approved March 7, 1874."

In accordance with the provisions of the foregoing resolution, the honorable the commissioners of school and university lands did, on the 19th of June, 1874, make out and execute an appointment, of which the following is a copy:

"OFFICE OF THE COMMISSIONERS OF SCHOOL AND UNIVERSITY LANDS,
"*Madison, June* 19, 1874.

"In accordance with joint resolution No. 36, approved March 7, 1874, the undersigned, commissioners of school and university lands, hereby appoint D. A. Reed, of Door County, in the State of Wisconsin, to appraise the lands referred to in said resolution, as provided therein.

"PETER DOYLE, *Secretary of State.*
"FRED. KUEHN, *State Treasurer.*
"A. SCOTT SLOAN, *Attorney-General.*
"*Commissioners of School and University Lands.*"

And in accordance with the provisions of said joint resolution the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company did, on the 1st day of August, 1874, make and execute an appointment, of which the following is a copy:

"At a meeting of the board of directors of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, held at the office of the Peshtigo Company, in the city of Chicago, on Wednesday, June 3, 1874, at 10 o'clock a. m., pursuant to notice, the following resolution was unanimously adopted by the board:

"'*Resolved*, That Jesse Spalding, Isaac Stephenson, and William E. Strong be and are hereby appointed a committee to proceed to have the lands of the land grant appraised according to the late act of the legislature of Wisconsin, and to apply for a deed to the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company of one-quarter of the said lands now due for work done by the said company, and said committee are further authorized and empowered to name the commissioner to appraise the said land grant in behalf of the canal company, to act with the commissioner named by the State.

"'I hereby certify that the above and foregoing resolution is an accurate copy from the record books of the canal company.

"'WM. E. STRONG,
"'*Assistant Secretary.*'

"In pursuance of the resolution hereinbefore recited, we, the undersigned, a majority of the committee named in said resolution, do hereby nominate and appoint the chairman of our committee, Hon. Jesse Spalding, of Chicago, the commissioner to classify and appraise the Sturgeon Bay Canal land grant in behalf of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, and do hereby request Mr. Spalding, the commissioner so appointed by us, in behalf of the canal company, to accept the appointment, and to discharge the duties imposed upon him by the legislative act referred to in said resolution, in order that the canal company may secure from the State of Wisconsin at an early day the deed which it is entitled to for work already performed.

"ISAAC STEPHENSON,
"WM. E. STRONG.

"AUGUST 1, 1874."

Pursuant to the provisions of said joint resolution 36 and of said appointment hereinbefore recited and fully set forth, we, the undersigned commissioners, met at the office of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, in the city of Chicago, on Friday, the 7th day of August, A. D. 1874, and from examination and reports already made and on file of about 130,000 acres of the land grant, and from the best evidence to be obtained as to the remaining 70,000 acres, proceeded to classify the said land grant of 200,000 acres into four distinct and separate classes, as to value and to appraise and fix a value to each of said classes as in said joint resolution provided, according to our best judgment, as will fully appear from the schedule of such classification and appraisal hereto attached.

DENIS A. REED,
Commissioner in behalf of the State of Wisconsin.
JESSE SPALDING,
Commissioner in behalf of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company.

of Sturgeon Bay with the waters of Lake Michigan: *Provided*, That said mortgage shall not be or become a lien or incumbrance upon the lands above mentioned, or in any manner affect or impair the right, title, or interest of the State of Wisconsin thereto or therein, except and until the said canal, or parts of it, is constructed as required by existing laws in relation thereto: *And provided further*, That whenever one-fourth, or one-half, or three-fourths part of the work of construction of said canal is performed by said company, or whenever they shall have completed the whole of said canal, the one-fourth, one-half, three-fourths, or the whole of said lands, as the case may be, shall be conveyed to said company by the State of Wisconsin, or its proper officers as now provided by law, and when so conveyed, the same, or any portion thereof shall thereafter be and become subject to any mortgage or deed of trust said Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company shall already have executed, or may thereafter execute or cause to be executed thereon, or on any portion thereof, for the better securing thereby of any bonds that may be issued by said company in connection with said mortgage, and to the extent and in the manner provided for in any such mortgage or deed of trust, and any mortgage or deed of trust which said company shall think proper or necessary for them to execute in aid of the construction of said canal, prior to the time of the construction of any part or of the whole of said canal, shall be and become a lien on said lands and canal, and on the net tolls and income thereof, as said work progresses or is completed as is herein provided, and not ohterwise.

SEC. 2. The bonds to be issued by said company under and in accordance with and to be secured by the mortgage or deed of trust of said company above mentioned may be issued in sums of not less than one hundred nor more than one thousand dollars, may draw such interest, not exceeding 10 per cent. per annum, payable semi-annually, as said company may determine upon, and may be sold and disposed of by said company at, above, or below par, in their discretion, in aid of the construction and completion of said canal and harbor. And in case said company shall fail to sell or otherwise dispose of said bonds satisfactorily, in time to complete and finish said canal and harbor as herein provided for, they may, but shall not be required hereby, to so complete the same.

SEC. 3. This act shall be published, and take effect immediately.

Approved March 5, 1873.

EXHIBIT F.—COMMISSIONERS' APPRAISAL OF LAND GRANT, 1874.

To the honorable the commissioners of school and university lands, Madison, Wis.:

At the last session of the Wisconsin legislature the following joint resolution was passed:

"Joint resolution No. 36, A.

"*Resolved by the assembly (the senate concurring)*, That the school-land commissioners are hereby authorized and directed, whenever application is made to them by said Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, so to adjust all differences now existing respecting a division of the land grant and the delivery of a deed of one-quarter in value of the same to said company as will substantially do justice both to the State and the canal company, and to that end to name a commissioner to appraise said land, in connection with a commissioner to be named by the canal company, which commissioners thus named shall fix a value to all such lands by sections and fractional sections, from the best evidence to be obtained without a personal examination of the land, and from such evidence the commissioners so appointed shall classify the lands into four classes as to value, and after such classification shall have been made, the canal company shall have the right to select from any or all the four classes an amount of land equal to one-quarter of the value of the whole amounts thus valued, and in case the two commissioners so appointed shall fail to agree upon the value of any of the land, the school and land commissioners shall decide the disputed question, and when the commissioners shall have so appraised the lands and so classified the same, and the canal company have made such selections, and certified the same to said school-land commissioners, then the school-land commissioners shall deed to said canal company the said land so selected by it. The compensation of the examining commissioners shall be determined and paid by said canal company.

"Approved March 7, 1874."

In accordance with the provisions of the foregoing resolution, the honorable the commissioners of school and university lands did, on the 19th of June, 1874, make out and execute an appointment, of which the following is a copy:

"OFFICE OF THE COMMISSIONERS OF SCHOOL AND UNIVERSITY LANDS,
"*Madison, June* 19, 1874.

"In accordance with joint resolution No. 36, approved March 7, 1874, the undersigned, commissioners of school and university lands, hereby appoint D. A. Reed, of Door County, in the State of Wisconsin, to appraise the lands referred to in said resolution, as provided therein.

"PETER DOYLE, *Secretary of State.*
"FRED. KUEHN, *State Treasurer.*
"A. SCOTT SLOAN, *Attorney-General.*
"*Commissioners of School and University Lands.*"

And in accordance with the provisions of said joint resolution the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company did, on the 1st day of August, 1874, make and execute an appointment, of which the following is a copy:

"At a meeting of the board of directors of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, held at the office of the Peshtigo Company, in the city of Chicago, on Wednesday, June 3, 1874, at 10 o'clock a. m., pursuant to notice, the following resolution was unanimously adopted by the board:

"'*Resolved*, That Jesse Spalding, Isaac Stephenson, and William E. Strong be and are hereby appointed a committee to proceed to have the lands of the land grant appraised according to the late act of the legislature of Wisconsin, and to apply for a deed to the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company of one-quarter of the said lands now due for work done by the said company, and said committee are further authorized and empowered to name the commissioner to appraise the said land grant in behalf of the canal company, to act with the commissioner named by the State.

"'I hereby certify that the above and foregoing resolution is an accurate copy from the record books of the canal company.

"'WM. E. STRONG,
"'*Assistant Secretary.*'

"In pursuance of the resolution hereinbefore recited, we, the undersigned, a majority of the committee named in said resolution, do hereby nominate and appoint the chairman of our committee, Hon. Jesse Spalding, of Chicago, the commissioner to classify and appraise the Sturgeon Bay Canal land grant in behalf of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, and do hereby request Mr. Spalding, the commissioner so appointed by us, in behalf of the canal company, to accept the appointment, and to discharge the duties imposed upon him by the legislative act referred to in said resolution, in order that the canal company may secure from the State of Wisconsin at an early day the deed which it is entitled to for work already performed.

"ISAAC STEPHENSON,
"WM. E. STRONG.

"AUGUST 1, 1874."

Pursuant to the provisions of said joint resolution 36 and of said appointment hereinbefore recited and fully set forth, we, the undersigned commissioners, met at the office of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, in the city of Chicago, on Friday, the 7th day of August, A. D. 1874, and from examination and reports already made and on file of about 130,000 acres of the land grant, and from the best evidence to be obtained as to the remaining 70,000 acres, proceeded to classify the said land grant of 200,000 acres into four distinct and separate classes, as to value and to appraise and fix a value to each of said classes as in said joint resolution provided, according to our best judgment, as will fully appear from the schedule of such classification and appraisal hereto attached.

DENIS A. REED,
Commissioner in behalf of the State of Wisconsin.
JESSE SPALDING,
Commissioner in behalf of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company.

Total number of acres.

	Acres.	Appraised value per acre.	Amount.
In first class	41,961.20	$4 50	$188,915 40
In second class	38,350.03	3 50	134,225 10
In third class	74,984.97	2 50	187,462 42
In fourth class	44,653.78	1 50	66,980 67
Total	199,969.98	.....	577,583 59

STATE OF ILLINOIS,
Cook County, ss:

We, the undersigned commissioners, as aforesaid, do hereby certify that the above and foregoing classification and appraisal of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company's land grant is the original and only classification and appraisal made by us, and that the valuation as affixed and set opposite each tract is true and correct, the whole comprising 200,000 acres, be the same more or less, and amounting in the aggregate to $577,583.59.

DENNIS A. REED,
Commissioner in behalf of the State of Wisconsin.
JESSE SPALDING,
Commissioner in behalf of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company.

CHICAGO, *August* 24, 1874.

Filed in the office of the secretary of state, September 7, 1874.

S. CADWALLADER,
Assistant Secretary of State.

UNITED STATES OF AMERICA,
State of Wisconsin, Department of State, ss:

To all to whom these presents shall come:

I, Ernst G. Timme, secretary of state of the State of Wisconsin, do hereby certify that the foregoing copy, classification, and appraisal of the Sturgeon Bay land grant, except the descriptions of land ..... has been compared by me with the original classification and appraisal on file in this department, and that the same is a true copy thereof, and of the whole of such original.

In testimony whereof I have hereunto set my hand and affixed my official seal, at the capitol, in the city of Madison, this 12th day of October, A. D. 1886.

ERNST G. TIMME,
Secretary of State.

EXHIBIT G.—REPORT OF INVESTIGATING COMMISSION, 1876.

Hon. D. W. MAXON, JOHN NADER, AND J. D. WILLIAMS:

GENTLEMEN: Under your appointment as commissioners to inquire into the transactions of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, you are directed to enter upon the examination, with as little delay as possible, and to report your doings, with the testimony taken, to the undersigned.

You will inquire especially what steps have been taken by the company to dispose of the lands granted to said company; whether said lands are held for sale at fair and reasonable prices; the amount required to be paid at the time of purchase; length of credit given for balance, and rate of interest; the expense of sale and by whom paid, and whether any obstacles are interposed where parties desire to purchase at fair prices.

You will also inquire whether the company obtained more than one-quarter in value of the grant; and, if so, by what means or influences such excess in value was obtained; what arrangements, if any, the company has made for prosecuting the work; what negotiations are pending for that purpose, with your opinion as to the probability of the company completing the work or prosecuting the same during the coming year.

And, generally, you are referred to chapter 286 of the laws of 1876, and directed to make full inquiry in accordance with its provisions.

The secretary of state is required to embody the results of your investigation in his next annual report. That report will be made by the 10th day of October next, and you will see the necessity of completing your labors by that time.

Very respectfully,

PETER DOYLE,
Secretary of State.
FERD. KUEHN,
State Treasurer.
A. SCOTT SLOAN,
Attorney-General.

Dated September, 1876.

Filed September 25, 1876.

PETER DOYLE,
Secretary of State.

UNITED STATES OF AMERICA,
State of Wisconsin, Department of State:

To all to whom these presents shall come:

I, Ernst G. Timme, secretary of state of the State of Wisconsin, do hereby certify that the foregoing copy of instructions to investigating commission on Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company has been compared by me with the original instructions on file in this department, and that the same is a true copy thereof, and of the whole of such original.

In testimony whereof I have hereunto set my hand and affixed my official seal, at the capitol, in the city of Madison, this 12th day of October, A. D. 1886.

ERNST G. TIMME,
Secretary of State.

To the honorable commissioners of school and university lands: Peter Doyle, secretary of state; Ferd. Kuehn, state treasurer; A. Scott Sloan, attorney-general:

Your commission, appointed in accordance with chapter 286 of the laws of 1876, respectfully report:

That they have made diligent inquiry into the transactions of the Sturgeon Bay and Lake Michigan Ship Canal and Harbor Company, and have examined under oath all the important witnesses that could be reached within the limited time at their disposal. The testimony taken, which is quite voluminous, accompanies this report.

The following is a brief statement of the facts proved by the testimony taken:

The present canal company was organized May 7, 1872, for the purpose of building a ship canal between Sturgeon Bay and Lake Michigan, a distance of about one and a quarter miles, for which purpose Congress made a conditional grant of 200,000 acres of land.

The following officers were duly elected: President, William B. Ogden, of New York; vice-president, Thomas H. Beebe, of Chicago; secretary, Joseph Harris, of Sturgeon Bay; assistant secretary and treasurer, William E. Strong, of Chicago.

Active work on the canal was begun in July of the same year, and prosecuted with vigor during the season, and only ceasing when the ice formed in Sturgeon Bay. The quantity of material removed was 191,035 cubic yards. In the beginning the only available means under control of the company was the sum of $26,055.17, in the hands of the State treasurer, which fund had been derived from settlements made with trespassers on the land grant.

During the middle of the summer of 1872 it became evident to the officers of the company that money would have to be provided in order to accomplish the work contemplated. At a meeting of the board of directors held September 9, 1872, it was resolved that $55,000 be borrowed by the company as necessary to complete one-quarter part of the canal work this season. Thirty thousand dollars of this amount was to be advanced by different members of the company and $25,000 by the Peshtigo Company. The amount actually paid into the treasury in cash for which full-paid stock was issued prior to September 10, 1873, was $68,480.

During the year 1873, 73,070 cubic yards of material were removed; making a grand total of 264,105 cubic yards removed up to November 1, 1873.

During the year 1874, 24,649 cubic yards of material were removed. Grubbing and clearing the route of the canal, reduced to cubic yards, as per Lieutenant Martin's report to Governor Washburn September 29, 1873, 15,000 cubic yards; making a gran total of 303,754 cubic yards actual work done.

The total estimate of the work, including grubbing and clearing, equals 998,400 cubic yards, one-fourth of which is 249,600 cubic yards, which deducted from the total amount of work done, viz: 303,754 cubic yards, gives 54,154 cubic yards in excess of one-quarter of the entire work of excavation.

These figures, as taken from the Chief Engineer and the company's books, together with Lieutenant Martin's report and a personal inspection of the work by your commission, satisfy them that the above amount of work has been done. The company has made no effort to sell the patented lands; they do not consider that they are obliged to do so under section 4, chapter 105, laws of 1868. They are making due effort to sell agricultural lands under chapter 224, laws of 1876, advertising the same for sale in the Oconto and Door County papers. The price of these lands ranges from $2.50 (minimum price fixed by law) to $5.50 per acre, one-third payment down, balance in one and two years, with interest at 7 per cent. per annum. Expense of 5 per cent. commission and cost of survey, &c., on sales comes out of the proceeds of the land grant.

They have mortgaged the entire land grant, executing a trust deed to secure the payment of $350,000 of bonds running twenty years with 7 per cent. per annum interest, payable in gold semi-annually. This mortgage interferes materially with the sale of the patented lands. The company had reason to believe that the quickest and best method of raising the money to complete the canal was by issuing bonds secured by mortgage on the land. The company had good reason to believe that the bonds would meet with ready sale at a fair price, but owing to the financial troubles of the country the bonds have not met with the sale anticipated, and the work has been suspended in consequence of a failure to negotiate them.

Negotiations are now pending with H. J. Furber, esq., of New York, as follows:

The company offer to take $100,000 of the bonds, Mr. Furber to take the balance, viz, $250,000, at par; the company is to give him a mortgage on the entire land grant, with canal improvements and appurtenances. This negotiation depends entirely upon the action of Congress, at the next session, in relation to the renewal of the land grant, extension of time for completion of the work, and the repeal of section 5 of the original act, or a modification of it. If the company succeed in this they will go on and complete the canal the coming year.

The company have offered on three different occasions to give the entire grant and franchises to any responsible party or parties who would guarantee to go on and complete the work, and wait upon them for one, two, and three years for the actual amount of money invested by the company, at a fair rate of interest, with good security. They have made every effort in the past to raise money to prosecute the work, having offered large inducements to parties in order to place the bonds, and guarantee to do the same in future, but unless the negotiations now pending are brought to a successful issue, your commission do not see any great probability of the work being completed the ensuing year. The company have done all in their power to protect the lands from trespass, and have obtained good prices for stumpage on all settlements made for the same. Good prices have been obtained for burned, dead, and down timber. No permits have been granted to cut green timber, and when the company have discovered any among the dead timber, they have treated it as trespass, and made settlements for the same at good prices. The very best of the pine timber on the Oconto River had been cut and removed before the company had acquired control of the lands. This greatly depreciated the value of the lands in that locality. Since the care of the canal land grant was placed under the control of the president of the canal company, trespassing has been almost wholly stopped. During the logging season of 1874 and 1875 the entire amount of green timber reported by the company's agent as being taken from the grant was less than 75,000 feet, and this amount was not taken wilfully, but by mistake. Prior to that extensive trespassing was committed on the grant.

Your commission are of the opinion that the canal company have obtained a patent for more than one-quarter in value of the entire grant, but have failed to discover that it has been obtained by any corrupt means, but simply upon what we consider a wrong basis of appraisal.

The following seven questions to the commissioners (under oath) appointed to appraise the land grant, under joint resolution No. 6, laws of 1874.

Question put to D. A. Reed: Have the canal company, or any director, stockholder, or any officer in any way connected with the company, at any time, paid you any money, stock, or other valuable consideration in order to secure your influence for their benefit in legislation or otherwise?

Answer. No.

Question put to Jesse Spalding: Did you, while acting as commissioner appointed to appraise the lands in behalf of the company, use any undue influence with the commissioner on the part of the State to make the appraisal to the advantage of the company?

Answer. None whatever.

The following question was put to William E. Strong, assistant secretary and treasurer of the canal company: Did the officers or members of the canal company, their agents or persons interested, use any influence for the purpose of obtaining more than one-fourth in value of the land grant?

Answer. None whatever, to my knowledge.

Your commission believe that the first and second class lands were appraised too low, and the third and fourth class too high. Inasmuch as the company selected almost entirely from the first-class lands, we believe they have obtained a patent for more than one-fourth in value of the entire grant. We arrive at this conclusion from the testimony taken, which proves that a large amount of the land classified as third and fourth class is worthless, containing no pine and being unfit for agricultural purposes, and that a considerable portion of the first and second class land is worth more than the average price fixed by the appraisers.

Your commission believe the grant to be ample to complete the work, and that the canal company are offering every inducement to obtain money to prosecute the work.

We believe that the financial difficulties of the country for the past three or four years has been the main reason why the canal has not been completed. We have taken considerable pains to enter into the details of the work of construction on the canal, having examined several witnesses who were engaged on the work, with a view of getting at the facts. The work was under the management of William T. Casgrain, chief engineer, whom we consider a very competent person. The accounts, papers, vouchers, estimates, plans, &c., pertaining to his office we found to be very complete, comprehensive, and systematic. We also found the books, records, and accounts of the company to be kept in a thorough business-like manner by the secretary and treasurer, William E. Strong, esq., of Chicago.

The acknowledgements of the commission are due to all officers of the company called upon for a full and minute detail of the transactions of the company, also to all witnesses examined, for their readiness to testify at our request. A large number of witnesses have been examined with a view of getting at the facts, without reference to reported tendencies either for or against the company.

Your commission have endeavored to give an honest and correct opinion based upon the evidence taken. Having made this brief statement of the principal facts covering the points involved in the special instructions to your commission, and generally under chapter 286, Laws of 1876, for the details of our investigations, we would respectfully refer you to the testimony accompanying this report.

Respectfully submitted,

D. W. MAXON.
JOHN NADER.
J. D. WILLIAMS.

MADISON, WIS., *October* 7, 1876.

UNITED STATES OF AMERICA,
State of Wisconsin, Department of State, ss:

To all to whom these presents shall come:

I, Ernst G. Timme, secretary of state of the State of Wisconsin, do hereby certify that the foregoing copy of report of commission of 1876 relative to the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company has been compared by me with the original report on file in this department, and that the same is a true copy thereof and of the whole of such original.

In testimony whereof, I have hereunto set my hand and affixed my official seal, at the capitol, in the city of Madison, this twelfth day of October, A. D. 1886.

ERNST G. TIMME,
Secretary of State.

EXHIBIT H.—REPORT OF INVESTIGATING COMMITTEE, 1879.

[Report of the committee on State affairs on bills 97 and 303, A., and joint resolution No. 15, A.]

Your committee have had under consideration the above several bills and joint resolution, and would report as follows:

In order to give such a representation of the Sturgeon Bay Canal and its affairs that an intelligent understanding of the questions involved may be obtained, it is necessary to go back to the inception of the enterprise and give the salient points of its history. The waters of Green Bay are separated from Lake Michigan by a narrow

peninsula, about 75 miles long, and of an average width of about 12 miles. The large and constantly growing commerce of the bay is carried on by steam and sail vessels, which have to pass through the straits communicating with Lake Michigan at the northern end of the above-named peninsula. About 36 miles south from the straits an arm of Green Bay nearly cuts the peninsula in two, leaving a narrow isthmus of one mile and a quarter in width. This inlet from Green Bay is known as "Sturgeon Bay." It is 8 miles long, and varies in width from 2 miles at the entrance to about three-fourths of a mile at its easterly end.

The waters of Sturgeon Bay are deep enough to float the largest lake craft, except within about a mile of the head of the bay. The banks are high, and the bay constitutes a safe and land-locked harbor of sufficient capacity to float all the shipping of the great lakes at one time. The ease with which the narrow isthmus which separates Lake Michigan from the head of Sturgeon Bay could be cut through attracted attention at a very early day, and received favorable mention from General Lewis Cass while he was governor of the Territory. As the commerce of Green Bay increased in extent and importance, the annual losses of life and property by shipwreck at its outlet (which received the significant title of "Death's Door") made the necessity of securing communication between Lake Michigan and Green Bay by means of a canal across the Sturgeon Bay isthmus apparent to all who gave the subject attention. The fact, also, that the larger part of this commerce was with Milwaukee and Chicago, and that a saving of 150 miles in distance could be made in each round trip to vessels passing between those parts and harbors on the south half of Green Bay, was another strong consideration in favor of its construction.

The magnitude of the commerce of Green Bay is not generally realized. In the year 1870 the imports were $25,000,000 and the exports $65,000,000. There has doubtless been a large increase since that year, as the very important iron industry of the Green Bay country has almost wholly come into existence within that period. Statistics show that fully two-thirds of the exports of Green Bay are to the ports of Milwaukee and Chicago. In 1870 there was shipped from the bay 500,000,000 feet of lumber, 900,000,000 shingles, 340,000,000 of lath, 35,000,000 pickets, 2,500,000 railroad ties, 1,600,000 cedar posts, and 650,000 telegraph poles, besides many other important articles of export.

From the records of the light-house keeper on Green Island, which is directly opposite the entrance of Sturgeon Bay, it appears that nearly 7,000 vessels passed the light last year, the great majority of which would have found their way to and from Lake Michigan by the Sturgeon Bay Canal had it been in operation. The importance of the work has been greatly enhanced by the location of a harbor of refuge by the National Government at the eastern outlet of the canal.

This harbor is designed to afford an accessible and safe port in a storm, and vessels entering within the inclosure of the breakwater can pass through the canal into Sturgeon Bay, where the most perfect security is afforded.

This harbor is the only one of the kind on the lakes. It was rendered necessary by the long reach of dangerous coast south of Death's Door. The harbor was first located at Ahnapee, but afterwards changed to Sturgeon Bay, because it could be constructed at the latter point for about $180,000, or one-half the expense necessary at Ahnapee, and, besides, a much better and more commodious harbor would be secured. In the year 1878 the number of vessels that cleared from the port of Chicago was 10,494, and about 9,000 cleared from the port of Milwaukee.

The majority of these vessels pass by that part of the lake where the harbor of refuge named could be accessible in case of storm, and its construction would doubtless cause a great reduction in the number of wrecks which the history of navigation in the northern part of Lake Michigan has recorded.

As there is a widespread idea that the Sturgeon Bay Canal and Harbor enterprise is but of little importance and of trifling future value, your committee have felt it appropriate to give the above facts which have come to our consideration in our recent examination of the matters involved in the bills and joint resolution above named.

In the year 1864 "the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company" was formed, and among its members were many of the leading capitalists of Chicago, Milwaukee, and Northeastern Wisconsin. William B. Ogden was president of the company until his death, in August, 1877, since which time Jesse Spalding has held that office.

In the month of April, 1866, Congress granted 200,000 acres of land to the State of Wisconsin, to aid in the construction of a breakwater, harbor, and ship-canal connecting the waters of Green Bay and Lake Michigan. Congress afterwards assumed the expense of constructing the breakwater and harbor.

The grant was accepted by the State in 1868, as appears by chapter 105 of the general laws of that year, "which provides for the laying out and establishing of the route of said canal and determining the termination thereof, and also preparing a plan for the construction of said canal, in conformity with the provisions of said act of Congress, and making a diagram thereof to be approved by the governor, and when approved by him the same to be filed in the office of the secretary of state."

On the 21st of March, 1872, the diagram, plan, and specifications were approved by Governor Washburn, and on March 23, 1872, an act was passed amending chapter 105 of the general laws of 1868.

Section 3 of the act of March 23, 1872, reads as follows:

"The dimensions of said ship-canal, so to be constructed by said company, shall be at least 100 feet in width at the water surface, with sides of the ordinary slopes of one and a half to one, and shall be at least 13 feet in depth at the bottom of said canal."

Work was begun on the canal July 9, 1872, by dredging at the Sturgeon Bay end. According to the act of Congress, no part of the land grant was available to the company until one-fourth of the entire work was completed. Upon the certificate of the governor that such work had been done, it became the duty of the commissioners of public lands to give to the company one-fourth of the grant, and upon the completion of each succeeding fourth of the work another fourth of the grant was to be given to the company, until the entire work was completed and approved by the stated officers.

It appears that the only available funds at the disposal of the company when the work began, were about $26,000, which had been collected on account of trespass on the lands. As money was needed in the prosecution of the work, the members of the company advanced it from their private means to the extent of $60,000, until the first quarter of the work was finished. This money still remains invested in the enterprise, and the company has issued paid-up stock to the persons advancing it.

The enterprise suffered greatly from the financial panic which began in 1873, and the first quarter of the work was not finished until November, 1874. The financial pressure was so great that work was suspended until 1877. The company, having received one-fourth of the lands, endeavored to raise money by selling bonds secured on the lands; only about $8,000 worth of bonds were disposed of, and the company changed its plan, took back and canceled all the bonds sold, and offered its lands for sale in April, 1877. A sufficient sum was raised to warrant a resumption of the work, and a contract was made with O. B. Green, in which he agreed to finish the entire canal according to the required plans and specifications by the 1st of December, 1879.

The contractor took the work at a much lower rate than the first quarter had been constructed for, Green's contract being for 20 cents per cubic yard, while the price paid for the first quarter was 30 cents. The company are not bound to pay him more than $2,000 per month unless a greater sum is realized from the sale of their lands, and 10 per cent. of the amount earned is retained as security for the completion of the work.

In 1877 Governor Ludington certified on the report of Capt. John Nader, civil engineer, who had been appointed to examine the work, that a second quarter had been completed, and last March the public land commissioners issued patents for the second installment of lands. In November, 1878, the company's engineer, Capt. W. T. Casgrain, estimated that the third quarter of the work was completed, and the company applied for another installment of lands.

Under the commission of Governor Smith, Captain Nader proceeded to Sturgeon Bay, and according to directions received, made a careful and complete survey and estimate of the work already done, and also of what remained to be done in order to construct such a canal as the contract of the company required. His report stated that a revetment or pile and plank protection would be needed at the Sturgeon Bay end, in addition to what the company had supposed to be necessary, and which would cost in all $17,000. This so increased the total cost of the canal that the company lacked $11,000 of having completed the third quarter of the work on the basis required. Upon this showing the governor declined to issue a certificate that the third quarter of the canal had been completed, and until such certificate had been made the patent for the lands cannot be granted. The company have acquiesced in the decision, and give assurance of entire willingness to go on with the work on the plan proposed by Captain Nader, as soon as navigation opens. In a word, the company have nearly completed three-fourths of the work, and have received only one-half of the lands.

The above is, in brief, the history of the canal enterprise to the present time, and the question now arises, Do the interests of the State require any present legislation upon the matters pertaining thereto? In order to meet this issue squarely and frankly, let us consider the reasons given why such legislation should be had.

In the first place, it is claimed that the canal is not being constructed according to the plan originally adopted. The evidence before your committee shows that the company originally intended to submit a plan and specifications made by Major Houston, of the United States harbor works, in 1871, as the basis of a contract with the State, but that this plan and specifications were never so submitted. The contract with the State was upon a different basis, and in accordance with the modifications of the legislative act of March 23, 1872. The reason for the change seems to have been that there had been expectations of getting an additional grant, which

Congress, however, refused to give. The erroneous impression above referred to is doubtless owing in part to a report of the United States engineer, Major Houston, in 1873, respecting the work upon the harbor of refuge, in which he states that work had been commenced upon the canal "in accordance with his plan of 1871."

As the work on the canal was being prosecuted under the State authorities, it is evident that Major Houston was not informed of the character of the contract between the canal company and the State. Your committee do not consider it pertinent or necessary to refer to all the questions that have been raised in regard to the manner in which the canal shall be constructed, but deem it sufficient to state that the governor, land commissioner, and Captain Nader, who has been twice appointed to inspect the work, interpret the contract to call for the construction of "a canal which shall be 100 feet wide at the surface of the water, 13 feet deep below low-water mark of 1847, with banks sloped in the proportion of two bases to one perpendicular, with a revetment of about 1,500 feet on each side, at the Sturgeon Bay end, and two piers of 350 feet in length each, at the Lake Michigan end." This is the requirement of the State with respect to the manner in which the canal shall be constructed, and the canal company give a positive and unqualified assurance that they are willing and expect to complete the canal in accordance with said requirements.

Captain Nader also reports that it is probable that a revetment of about 2,000 feet may be needed to fortify certain places along the banks where springs enter the canal, or where the bank shows symptoms of breaking down. It is proper here to remark that the contract gives to the State full authority to make every needed requirement in order to secure a canal of sufficient capacity for the purposes require, and of reasonable permanence.

In the second place, it has been claimed that the land grant has been improperly handled, and that a change in existing laws is required in order to secure to the State the fulfillment of the canal company's contract. The company claim that on taking the grant they supposed they were to receive the grant in installments of 50,000 acres each. When they applied for the first quarter of lands, a question arose as to the interpretation of the act of the legislature as to the method of giving the lands. The law was ambiguous and indefinite, and the supreme court decided that under the statute referred to they should be given according to value, and not in quantity.

The value of the grant, as appraised by an agent of the State and an officer of the company, was $577,580.59, and 32,294 acres were patented to the company as the first installment. Last winter, a law was passed directing the land commissioners to issue the lands for the second quarter in acres, not to exceed, in the total amount issued, one-half of the entire grant. And the land commissioners were also authorized to issue the remaining two quarters of the grant in acres or value, as they deemed best. This act also repealed all previous acts relating to the manner of issuing the grant. In accordance with the law, this company received 66,116 acres of land. The reason which the company give for desiring the passage of the above act is that they wished to be able to secure such lands as were immediately salable. A law was passed in 1876 requiring the land to be distributed by lot, and as the company had received numerous applications for various tracts of land, they wished to be able to obtain such tracts, in order to realize money upon them at once.

The evidence submitted to the committee showed that the company, expecting in time to secure the entire grant, has been more solicitious to obtain such lands as they could sell immediately than those which were most valuable. It was also claimed by the company that a large proportion of the lands selected last summer were of a low grade, and that many valuable tracts which are insolated and remote, and consequently not marketable, were not taken. It has been claimed that the half of the grant issued to the company amounts to seven-eighths of the whole value. There was no evidence before the committee to substantiate this statement. The appraisement in the secretary of state's office shows that the part of the grant yet remaining is fully two-fifths of the whole in value. It was claimed by the company that the valuation of the entire grant on the appraisement was too high, and the report of an investigating committee, appointed in 1876 by the legislature, showed that it was not strictly correct in the proportionate values put upon the different grades. The appraisement of the company on the lands unpatented is about $117,000, and this is considered a minimum valuation.

It was also claimed by the company that none of the lands of the grant are absolutely worthless, and, in the opinion of the president and the company's land agent, that 50 cents per acre, or thereabouts, could be realized from the disposal of the poorest half of the lands yet unpatented.

It is also charged that the contractor has not done his work in full accordance with the terms of his agreement, and Captain Nader reports that if the excavation had been prosecuted less rapidly, and more attention given to removing material dredged out and placed on the banks, it would have been better. In his estimate of work yet to be done, however, he includes whatever outlay may be necessary to repair and perfect the banks in full accordance with the contract and specifications. There are also

charges that the terms of the contractor's agreement with the company have been changed to his advantage; but the evidence shows that whatever advantage he gains in one direction by the change he loses entirely or in great part in other ways.

The last charge which we shall here notice, is that the principal office of the company is not kept in Wisconsin, in accordance with the requirements of the statute. The officers claim that they have an office in Milwaukee, which is the only distinctive office which the company has. The president, secretary, and treasurer draw no salary, and perform such official acts as devolve upon them at their private offices. The land department, under the charge of D. W. Maxon, and the superintendence of the construction of the canal is under the charge of the chief engineer, Captain W. T. Casgain, both of whom have an office at 102 Wisconsin street, Milwaukee, which is rented and paid for by the company.

In conclusion we wish to say that the only interest which the people of Wisconsin and the legislature have in the whole matter is simply this that such a ship-canal is constructed at Sturgeon Bay as is contemplated by the law, and that the State retain sufficient security during the construction of the canal to guarantee the completion of the contract in exact accordance with its specifications. Divesting the question of all side issues, this simple problem now confronts us: Is it necessary or desirable to have additional legislation in order to enforce the completion of the Sturgeon Bay Company's contract with the State? As the law now stands, the State officers have it in their discretion to issue patents for the remaining lands, either according to value or amount, and the legislation asked would deprive them of this option and direct a specific manner of granting the lands.

Should bill 97 A become a law, it would render imperatively necessary, an expensive and tedious reappraisement of the *entire grant* in order to get at an equitable and proportionate valuation of the ungranted lands. The difficulty of this work, so far as it would pertain to the lands already granted, can be imagined when it is remembered that the most of them have been changed from their original condition by their present owners. The cost of an appraisement would be not less than 15 cents an acre, or $30,000 in all. Should bill 303 A and joint resolutions No. 15 A receive the approval of the legislature, they would provide for an investigation which would involve a large and uncertain expense. In both cases the expense would necessarily be borne by the State, and neither measure should be adopted unless there is grave reason to believe in its necessity.

It has been claimed that there is danger that the canal company, after having completed the third quarter of the work and received the lands therefor, will find that the last quarter of the grant is not sufficiently valuable to defray the expenses of constructing the last quarter of the canal, and so will abandon the work at that stage of operation.

In order to realize the improper character of this charge it is necessary to consider just what the company will forfeit in case it should abandon the work when three-fourths done. It would, of course, lose all title to the canal, as its rights, under the law, to the canal property only become perfect when the work is finally completed and accepted by the governor. The company would therefore lose the $60,000 advanced to complete the first quarter. It would also lose the fourth quarter of the land grant, which, if composed of the poorest lands, is claimed by the company to be worth 50 cents an acre; to be safe, we will call it half that, making $12,000; also, the retained percentage due the contractor, for which the company is liable, at the present time amounting to $10,000. In addition to this, the State officers would immediately sue the company upon its forfeiture of the contract, and enjoin the sale of its lands and recover back all that remained unsold. These amount at the present time to over 50,000 acres, and are worth about $50,000. There would also be added to this amount the unsold portions of the third quarter, so that at the lowest estimate not less than $50,000 worth of lands would be lost to the company. These sums amount in all to $132,500, which would be absolutely forfeited by the company should it fail to complete its contract. If the company goes on and finishes the canal it will cost $64,447 to complete the fourth quarter, according to the estimates of Captain Nader. This includes the probable invetment of 2,000 feet, which he estimates may be necessary.

It will therefore be seen that the company, in refusing to do work costing $64,447 would lose property and money to the value of $132,500. The company would also be liable to the contractor for such damages as he might be able to recover on his contract. There is also another consideration which you rcommittee deem to be of great importance as bearing upon this question, and that is that all the members of the canal company are engaged in lumbering on Green Bay and are individually interested in securing the cheaper rates of transportation which the canal would afford. The mills owned by members of this company produce yearly 100,000,000 feet of lumber, which is shipped out of the bay and which would pass through the canal if completed. The lowest estimate put upon the reduction caused by the cut-off in cost of transportation is 10 cents per 1,000 feet, and William B. Ogden estimated it as high

as 37½ cents per 1,000. It will therefore be seen that the members of the company would save from $10,000 to $37,500 annually in their private business from the reduced rates of transportation were the canal completed.

The books of the canal company seem to have been kept accurately, and show that only about $1,400 is due on all accounts, besides the retained percentage due the contractor. The able and explicit report of Captain Nader indicates clearly that the work is in such a state of progress as will easily render it possible to complete the canal, in accordance with the terms of the contract, on the 1st day of December, 1879. Your committee fully believe that the interests of the State in this matter are perfectly safe in the hands of the State officers, who have already shown the utmost solicitude and caution in the administration of their trust. They believe that justice to the company requires that it shall not be harassed or embarrassed by unnecessary legislation.

If the operations of the company and their contractor are not interfered with, the work will, in all probability, be entirely finished the present year. In view of the above considerations, and in the absence of all sufficient reasons, as we believe, for the expensive legislation proposed, we hereby recommend that bills No. 97 and 303 A, and joint resolution No. 15 A, be indefinitely postponed.

E. D. COE.
J. W. OSTRANDER.
CHAS. G. LEWIS.
HENRY P. FISCHER.

Your committee append hereto the following statement and petition, which has been referred to them:

Hon. D. M. KELLY,
Speaker of the Assembly, Madison, Wis.:

The undersigned citizens of Door County, in which county the Sturgeon Bay Ship-Canal is being constructed, respectfully represent:

That in the opinion of the undersigned the company constructing the canal has, since resuming work in the spring of 1877, pushed it intelligently and vigorously.

That it has conducted the enterprise in good faith, and that they see no doubt that it is the intention of the company to prosecute the work to completion during the current year.

The undersigned, therefore, would respectfully request the honorable body over which you preside to enter upon no legislation that shall in any way tend to hamper or embarrass the company in securing lands to which it may be entitled under the laws now on the statute book.

And further, they would urge that no legislation seems to them to be needed in connection with this work, but rather that the company should be unmolested in its aim to secure an early completion of an enterprise of so great importance to the State at large and Door County in particular.

The undersigned further represent that, in the opinions above expressed, they believe they represent the views of a large majority of the citizens of this county.

L. M. WASHBURN.
J. T. WRIGHT.
D. A. REED.
THOMAS SCOTT,
Sheriff Door County.
ELI A. THOMPSON.
CHRIST. LEONHARD,
County Treasurer.
R. M. WRIGHT.
CHRIS. DANIELS.
G. W. ALLEN.
JOHN LEATHAM.
MICHAEL DOHEARTY.
GEORGE O. SPEAR.
H. J. THOMPSON.
SCOFIELD & CO.
THOMAS H. PRATT.
S. N. BACON.
S. N. MCLOCHLIN.
JOSEPH HARRIS, Sr.
O. E. DREUTZER.
JACOB CROSS.
PHILIP JACOBS.
NOBLE & JOHNSON.
FELDMANN & GOODNOW.
JACOB DEHOS.
C. M. SMITH.
SHERWOOD & CO.
C. NOYES.
WILLIAM B. LAWRENCE.
A. MCEACHAM.
C. M. CHASE.
L. A. LARSON & CO.
A. W. LAWRENCE & CO.

The Committee on State Affairs have had under consideration Nos. 97 and 303 A., and joint resolution No. 15 A., and in reporting the same back, the members of said committee signing this report, submit the following reasons for the recommendation hereby made:

The Annual Report of the Secretary of State for 1876, on page 46, gives the history in brief of the Sturgeon Bay Canal Company, and the legislation in reference thereto up to the date of that report. For the better understanding of the matter in question, it has been deemed proper to quote a portion of the report:

"The importance of connecting the upper waters of Green Bay with those of Lake Michigan by means of a ship-canal across the long and narrow peninsula which sep-

arates them, was foreseen at an early date in the history of the State, but no legislative action was had in the matter till 1856. Chapter 129 of the private and local laws of that year named Robert F. Winslow, Abraham B. Bowen, Edward Smith, James D. Doty, John Day, Samuel Hale, Jackson Hadley, J. F. Loy, and Anson Ballard as incorporators of a company by the name of the Sturgeon Bay and Lake Michigan Canal Company.

"This company was authorized to locate, construct, and build a canal of such width, depth, and dimensions as they should deem expedient between the head of Sturgeon Bay and Lake Michigan, so as to connect the head water of said bay with said lake, and to construct a harbor at the mouth of said canal, and to dredge and improve the said bay, so as to make a sufficient channel, and convenient and safe harbor in said bay. For this purpose, the company was authorized to purchase, hold, and convey real and personal property, and to issue capital stock and necessary bonds. For some reason—probably the commercial embarrassment of 1857—the project languished and did not evince much vitality at that time.

" The legislature of 1858, finding that little or no progress had been made towards constructing this canal by the company especially incorporated for that purpose two years before, amended the law of 1856 by the enactment of chapter 237, private and local laws of 1858, requiring the company to commence the construction of the canal in accordance with the plan contemplated by the act of incorporation within one year, and to complete it so as to admit the passage of boats and vessels through the same within three years thereafter. It was provided that in case of failure to comply with the requirements of this last-named act, the original act of incorporation should be thenceforth void. The capital stock of the company was, by the act of 1858, limited to $500,000. Under the operation of chapter 237, private and local laws of 1858, the company passed out of existence and the project was for the time abandoned.

"Chapter 365, private and local laws of 1864, incorporated the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, with substantially the same rights and obligations as its predecessor, and named William B. Ogden, Freeland B. Gardner, Thomas H. Beebe, Joseph Harris, George Bennett, Alexander Mitchell, Charles D. Robinson, H. S. Baird, W. M. Whitcomb, Anson Eldred, and Andrew Reid as the first directors of the new organization. By this act the capital stock of the company was limited to $250,000, but no time was fixed for completing the work.

"The directors and incorporators of the new company seem to have been from the outset impressed with the impracticability of constructing a semi-public work of such magnitude as this with exclusively private capital. They accordingly bent their energies to procure a grant of public lands from the Federal Government, and finally succeeded in the first session of the Thirty-ninth Congress. By an act approved April 10, 1866, Congress granted to the State of Wisconsin, for the purpose of aiding the State in constructing and completing a breakwater and harbor and ship canal to connect the waters of Green Bay with the waters of Lake Michigan, two hundred thousand acres of public lands, to be selected in subdivisions, agreeably to the United States survey, by an agent or agents appointed by the governor of Wisconsin, subject to the approval of the Secretary of the Interior, from lands subject to private entry: *Provided*, That said selection should be made from alternate and odd-numbered sections of land nearest the location of said harbor and canal not otherwise appropriated, and not from lands designated by the United States as 'mineral' before the passage of that act, nor from lands to which the rights of pre-emption or homestead had attached.

"The act also prescribed that the canal should be at least 100 feet in width, with a depth of water not less than 13 feet. Having obtained this important aid from the General Government, the company duly elected its officers, in the city of Milwaukee, on the 4th day of October, 1866, under and by virtue of chapter 365, private and local laws of Wisconsin for 1864. By chapter 105 of the general laws of 1868, the State accepted the grant of land conveyed by the act of Congress, approved April 10, 1866, subject to all the conditions, restrictions, and obligations therein mentioned, and conferred it in like manner on the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company. The route of the canal was surveyed, laid out, and established pursuant to law, and work continued thereon for several years. In 1873, the company, having completed one-fourth of the canal, made a formal demand on the State for one-fourth of the lands granted, pursuant to section 4, chapter 105, of the general laws of 1868.

"Pending some discussion as to the precise interpretation to be given this section, the whole matter remained open for the legislature of 1874, which, by joint resolution No. 6, provided for the appointment of commissioners to appraise the lands, authorized the company to select any lands not to exceed in *value* one-fourth of the amount at which the *whole* were appraised, and directed the commissioners of school and university lands to thereupon convey the lands thus selected of the company. This was done as provided, and 32,342.29 acres patented to the company September 7, 1874.'

It is apparent from the act of Congress, approved April 10, 1866, entitled "An act granting to the State of Wisconsin a donation of public lands to aid in the construction of a breakwater and harbor and ship-canal, at the head of Sturgeon Bay, in the county of Door, in said State, to connect the waters of Green Bay with Lake Michigan, in said State," by the terms of which 200,000 acres of Government land were granted to the State of Wisconsin for the purpose of aiding said State in constructing and completing a breakwater, harbor, and ship-canal to connect Green Bay with Lake Michigan, and from chapter 105 of the general laws of Wisconsin for 1868, by which the State accepted the grant above described, "with the restrictions and upon the terms and conditions contained in said act of Congress," that the State occupies the relation of a trustee to see that the lands thus appropriated by Congress are faithfully and honestly used to accomplish the purpose for which the lands were granted.

In speaking of another grant of similar nature, the Supreme Court of the United States has defined the duties and obligations resting upon the State in clear and unmistakable terms:

"The State accepted the grant subject to all the conditions prescribed. She thereupon became the agent and trustee of the United States. The powers and duties with which she was clothed might have all been discharged by private individuals. The characters of sovereign and trustee were united in the same party. The State did not in any wise abdicate her sovereignty by accepting the trust, but the former might be exercised to render more effectual the discharge of the latter. She was in no wise fettered, except as she had agreed to fulfill all the terms and conditions which accompanied the grant. To that extent she was clearly bound, and anything in conflict with those conditions would be *ultra vires* and cannot be supported. What were the terms to which she submitted herself? She was to devote the lands to the accomplishment of the object which Congress had in view, and there was an implied agreement on her part to take all the measures reasonably within her power to make their application effectual to that end. The mode was left entirely to herself." (Tucker *v.* Ferguson, 22 Wallace, 572.)

If the State should be negligent in the execution of such trust, and through such negligence the fund appropriated for a particular purpose should prove insufficient for that purpose, considerations of honor and good conscience would induce the State to make good that deficiency out of its own funds, whether there was any legal way of compelling it to do so or not. Especially is this true since the General Government has expended, and will hereafter be obliged to expend, large sums of money in making a harbor of refuge on the Lake Michigan end of the Sturgeon Bay Canal, on account of the building of which the Sturgeon Bay Ship-Canal Company has been relieved from the construction of a portion of the works provided by the grant, upon the faith and belief that the State will see that the canal is finished and completed in a substantial and workmanlike manner, creditable alike to the State, which is responsible for the execution of the trust, and to the General Government, which created the trust fund.

In the consideration of the bills and resolution above described the committee has been attended by several of the officers of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company, including the president, Jesse Spalding; the secretary, W. E. Strong; the land commissioner, D. W. Maxon, and the chief engineer, W. T. Casgrain, and also by the State inspector, John Nader, and by these gentlemen has been put in possession of certain facts which have had an important bearing upon the deliberations of this committee in regard to the bills and resolution referred to it, some of which facts it may be proper briefly to present:

First. The general offices of the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company are *not* kept within the State of Wisconsin, but are located in the city of Chicago. In the case of the State *ex rel.* Attorney-General against the Milwaukee, Lake Shore and Western Railroad Company, decided by the supreme court and reported in Northwestern Reporter, October 26, 1878, it was held that this was such a violation of the law as would authorize the forfeiture of the charter of a corporation created by the State upon proper proceedings taken by the attorney-general.

Second. The original estimates for the construction of the canal contemplated the revetting or docking of the entire length of the canal. This appears from the estimates of J. E. Thompson, civil engineer, made in 1867, and the estimate of W. T. Casgrain, the present engineer of the company, made in 1871, while he was connected with the Corps of Engineers of the United States Army as assistant United States engineer. The estimates of both these gentlemen are contained in the report of the latter to Maj. D. C. Houston, Corps of Engineers, United States Army, dated November 21, 1871. One of the estimated items of the cost of the canal in such estimate is "18,000 linear feet pile-revetment, at $8 per linear foot, $144,000."

In speaking of these estimates, Major Houston, in his report dated November 29, 1871, to General A. A. Humphreys, Chief of Engineers, United States Army, says: "The sum of $144,000 is estimated for revetting the banks of the canal, which, owing to the character of the material, *is necessary to complete the work.*" It is probable that

this revetment could now be constructed at a cost considerably below the estimate given above, owing to the reduced price of labor and materials, and good judges estimate that its present cost would not exceed $90,000.

Third. No portion of the canal has been docked or revetted in accordance with the plan and specifications adopted by the company in September, 1871, hereinafter referred to, nor has the company made any attempt to construct a revetment in accordance with that plan.

Fourth. In the fall of 1871 the company, by resolution, adopted the plan and specifications of W. T. Casgrain, then connected with the United States Engineer Corps. That plan, map, and specifications were very carefully prepared, and provided for a revetment upon both sides of the canal throughout its entire length. Owing to the destruction of that plan, map, and specifications in the Chicago fire of 1871, Captain Casgrain prepared, under the direction of Maj. D. C. Houston, United States Corps Engineer, a new map and specifications from such field notes and data as he had preserved, which map and specifications are filed in the office of Maj. H. M. Robert, United States Engineer Corps, who is the successor to Major Houston, and provide for a revetment, as above stated.

In May, 1872, a contract was let for the first quarter of the work, to be constructed according to this plan and specifications. The first quarter's work was accepted by the State inspector, and a patent issued to the company for 32,342.29 acres of the land granted by Congress to the State, but that portion of the work was not revetted.

Fifth. Chapter 105 of the general laws of 1868, by which the lands granted by Congress to aid in the construction of this canal were conferred upon the company, provided that when the governor of the State is satisfied that the company has done one-fourth, one-half, or three-fourths of the work required in constructing such canal, he shall certify the same, and in such certificate "shall determine the portion of said lands the said company has become entited to in consideration of said work so done," and that thereupon the commissioners of the school and university lands shall convey by patent to the company "said proportion of said lands respectively as selected by said company."

A controversy having arisen between the company and the commissioners of the school and university lands in regard to the meaning of this statute, the company claiming that they were entitled to one-fourth in quantity of the lands granted, that is, in acres, to be selected by the company, and the commissioners claiming that the company was only entitled to one-fourth in value of the lands, the company applied for a mandamus to compel the commissioners to issue to the company a patent of one-fourth in quantity of the lands. The case is reported in thirty-fourth Wisconsin, page 162. State *ex rel.* Sturgeon Bay and Canal Company *v.* Commissioners of School and University Lands, and the opinion of the supreme court upon that subject will be found at length at the place indicated above. A brief extract from that opinion will perhaps be sufficient for the purposes of this report:

"The court experiences no difficulty, therefore, in saying that it is one-fourth part in value of the lands to which the relator is entitled, provided, upon consideration of the whole and every part of the statute, and of the act of Congress donating the lands, such seems to have been the legislative intent.

"It is not to be questioned, we think, that the intention clearly manifested by Congress in making the grant, and by the legislature of the State in accepting it (which, though it may have the power to defeat the object of Congress by disposing of the lands without the making or completion of the improvement, has shown no such purpose or disposition) favors the construction put upon the statute by the respondents, and contended for by the attorney-general, who represents them. The legislature has indicated its purpose to give effect to the will and expectation of Congress, and faithfully to execute the trust reposed in the State by the very words of the statute under consideration, which requires the governor to satisfy himself that the 'work has been done in accordance with the requirements of this act and of the act of Congress aforesaid.'

"The spirit and policy of the acts, both of Congress and of the legislature, seem to demand, therefore, the construction given by the commissioners, unless such construction is repugnant to particular words of the statute establishing a contrary intent. They demand such construction, because otherwise, upon the facts returned by the commissioners, the object of Congress and of the State in donating any part of the lands may be ultimately defeated. Other circumstances being equal, or not preventing, that construction is always best which will best subserve the great primary object of the law-giver."

Sixth. After the delivery of this opinion, joint resolution No. 6 A was passed and approved March 7, 1874, found in the General Laws of 1874, page 770, which provided for the appointment of three commissioners to divide the lands granted by Congress into four classes, first, second, third, and fourth, and to put a valuation upon the lands in each class, and providing that after such classification and valuation has been

made, the company should have the right to select from any and all the classes an amount of land equal to one-fourth of the whole amount thus valued.

"JOINT RESOLUTION No. 6 A.—In relation to the Sturgeon Bay and Lake Michigan Canal and Harbor of Refuge.

"*Resolved by the asssembly* (*the senate concurring*), That the school-land commissioners are hereby authorized and directed, whenever application is made to them by said Sturgeon Bay and Lake Michigan Ship Canal and Harbor Company, so to adjust all differences now existing respective of a division of the land grant and the delivery of a deed of one-quarter in value of the same to said company, as will substantially do justice both to the State and the canal company, and to that end to name a commissioner to appraise said land in connection with a commissioner to be named by the canal company; which commissioner thus named shall fix a value to all of said lands by sections and fractional sections from the best evidence to be obtained without a personal examination of the land; and from such evidence the commissioners so appointed shall classify the lands into four classes as to their value, and after such classification shall have been made the canal company shall have the right to select from any or all of the four classes an amount of land equal to one-quarter the value of the whole amount as thus valued, and in case the two commissioners so appointed shall fail to agree upon the value of any of the said land the school-land commissioners shall decide the disputed question. And when the commissioners shall have so appraised the lands and so classified the same, and the canal company have made such selection and certified the same to said school-land commissioners, then the school-land commissioners shall deed to said canal company the said land so selected by it. The compensation of the examining commissioners shall be determined and paid by said canal company.

"Approved March 7, 1874."

In this connection, your committee refer to the report of a committee of investigation appointed in accordance with chapter 286 of the laws of 1876, found on page 50 of the secretary of state's report for 1876, from which the following is an extract:

"Your commission believe that the first and second class lands were appraised too low, and the third and fourth class too high. Inasmuch as the company selected almost entirely from the first-class lands, we believe they have obtained a patent for more than one-fourth in value of the entire grant. We arrive at this conclusion from the testimony taken, which proves that a large amount of the land classified as third and fourth class is worthless, containing no pine and being unfit for agricultural purposes, and that a considerable portion of the first and second class land is worth more than the average price fixed by the appraisers."

In accordance with this resolution, the lands were divided into four classes. They valued the lands in the different classes as follows:

	Per acre.
First class	$4 50
Second class	3 50
Third class	2 50
Fourth class	1 50

Under the patent of lands granted the company at the completion of the first quarter's work, as stated above, 32,342.29 acres of land were conveyed to the company, which were estimated by the commissioners to be one-quarter in value of the total grant.

After the decision of the supreme court in the thirty-fourth Wisconsin, referred to above, and after joint resolution No. 6, of 1874, and after the land had been classified and valued as provided by such resolution, chapter 88 of the laws of 1878 was enacted, by the terms of which the company was entitled to demand and receive, under the certificate that a second quarter of the work had been completed, a patent for a sufficient number of acres to make the total amount patented to the company, under the patents issued for the first and second quarters of the work, equal to one-half of the total grant, or, in the aggregate, 100,000 acres.

A reference to this law will show that if it was not designed to evade the decision of the supreme court in the thirty-fourth Wisconsin, quoted above, and to do precisely what the supreme court said that, up to the time of the decison of that case, the legislature had manifested no purpose or disposition to do, viz, "defeat the object of Congress by disposing of the lands without the making or completion of the improvement," it certainly may, and perhaps will, have that effect. For of the 100,000 acres hitherto patented to the company for the first two quarters' work—

39,962.79 acres were of the first class, valued at	$179,832 46
27,300.13 acres were of the second class, valued at	95,550 40
19,801.07 acres were of the third class, valued at	49,502 67
10,346.62 acres were of the fourth class, valued at	17,019 93

Of the lands left—

2,018.41 acres are of the first class, valued at	$9,082 84
11,049.90 acres are of the second class, valued at	38,674 65
55,183.90 acres are of the third class, valued at	137,959 75
33,307.10 acres are of the fourth class, valued at	49,960 74

It should be remarked that the valuations referred to are those made by the commissioners about the year 1874, pursuant to joint resolution No. 6, of 1874. It is also worthy of remark that the lands selected by the company hitherto have been taken chiefly from the upper-class lands. It is more than doubtful whether the company has not already received far more than one-half of the value of the grant. It was stated to the committee by the land commissioner of the company, and by the secretary of the company, that the lands not yet patented are not worth to exceed in value one-half of the appraisement.

It was also stated that if they were allowed to take a patent for the third quarter's work, under the law of 1878, of course the company would choose the best lands now unpatented, *i. e.*, 50,000 acres. This would leave 50,000 acres with which to complete the fourth and last quarter's work. It was further stated that of the 100,000 acres now unpatented, about 30,000 acres are practically worthless. If from the 100,000 acres now unpatented the company is permitted to choose 50,000 acres of the best lands, in payment of the third quarter's work, there will be left with which to complete the fourth and last quarter's work about 30,000 acres admitted to be worthless, and 20,000 acres inferior to all that has been previously patented.

It seems to the undersigned too plain for argument that, under the law of last winter, chapter 88, laws of 1878, the trust fund held for the purpose of securing the completion of the work has already been seriously impaired, and will be rendered practically of very little value if the company can select under it at will 50,000 acres of the choicest lands now unpatented; especially is this true in view of the further statement made by the land commissioner of the company—that the estimate of the secretary of state as to the total value of the lands now unpatented, viz, $235,678, is double its real value. If that is correct, the real value of the lands yet unpatented does not *exceed* $117,500.

If the 100,000 acres yet unpatented for do not exceed in value $117,500 (other information makes the value far less), and if a patent of 50,000 acres of the best lands left is granted the company for the third quarter's work, how much will the balance, consisting of 30,000 acres, of no value at all, and 20,000 acres, inferior to all lands hitherto patented, be worth?

Seventh. In May, 1877, the contract for the last three-fourths of the work was let to the present contractor, O. B. Green. No advertisement that bids for doing the work would be received was published. The opportunity to bid was given privately to a few individuals, and the contract was awarded to O. B. Green, the present contractor. After the contract had thus been submitted to bids and awarded to O. B. Green, the specifications were changed to provide for the payment of the contractor for dredging by scow measurement instead of by prism measurement, which, the committee is informed, made a difference in favor of the contractor of about 25 per cent.; prism measurement is measurement of the earth as it lies in its natural bed; scow measurement is measurement after it has been removed from its natural bed, and experience has shown that earth increases in measurement after removal from its natural bed, to the amount above stated. The same quantity of earth occupies less space before it is disturbed than it does after removal.

Eighth. In the two years since the contract was let payment in cash to the contractor, O. B. Green, has been made to the amount of $90,000 and upwards, and there is yet due the contractor a drawback of about $10,000.

Ninth. By an act of Congress subsequent to the one conveying the original grant, the General Government assumed the duty and responsibility of constructing at its own expense the harbor of refuge and breakwater at the Lake Michigan end of the canal, whereby the State and all parties connected with the improvement were relieved from the construction of certain pier work, the construction of which was one of original condition or grant, and would have involved an expenditure of a large sum of money.

Tenth. Of the 100,000 acres already patented to the company, there are still unsold and belonging to the company over 50,000 acres, and there have been sold by the company 48,000 acres for about $161,000. The company has received from the State about $40,000, collected by the State for trespasses committed upon lands included in the grant. In view of the facts above stated, the laws referred to, and the decisions of the Supreme Court of the United States and of the supreme court of this State, hereinbefore quoted, it is the opinion of the members of the committee who sign this report, and it is the duty of the State of Wisconsin to see that the lands

granted by act of Congress are faithfully applied to the construction and completion of the improvement for which they were granted, in a good and workmanlike manner, in accordance with the map, plan, and specifications made by a United States engineer (who is now the engineer of the company), and reported by him to the United States Engineer Corps. This would, of course, include the revetting or docking of the entire length of the canal as contemplated by the original plan, and without which, in our opinion, the canal will never be safely, thoroughly, and permanently completed. Nothing should be omitted which will secure the purpose for which the grant was made by the General Government. Nothing should be exacted of the company which is unnecessary or oppressive to the company.

The legislature of the State of Wisconsin is in duty bound to see that justice is done to both the company and the General Government. It is the guardian of good faith and honor of the State. It is the protector of the rights of the humblest citizen of the State, whether that citizen is an individual or a corporation. It is also the duty of every citizen to obey the laws of the State. One of the duties resting upon the company is to keep its general offices within the State, and it has been so decided, judicially, as will be seen by the following quotation:

"It is the duty of a private corporation to keep its principal place of business, its records, and the residence of its officers so located as to render it accessible to the process and to the exercise of the visitorial power of the State by which it is created; and a forfeiture may be adjudged for violation of this common law obligation." (State *ex rel.* Attorney-General *v.* Milwaukee, Lake Shore and Western Railroad Company, Northwestern Reporter, October 26, 1878.)

Another is to complete the work in a good and workmanlike manner, according to the purpose of the grant made, and when that work is so completed, or completed proportionally, the company is entitled to receive a ratable proportion of the value of the lands granted, and not before.

To accomplish these purposes, bills No. 97 A and joint resolution No. 15 A should be passed, and we therefore recommend their passage.

All of which is respectfully submitted.

EDWARD C. WALL.
JOHN RINGLE.
H. FLINN.

EXHIBIT I.—MEMORIAL TO CONGRESS FROM LEGISLATURE STATE OF WISCONSIN, FEBRUARY 6, 1877.

MEMORIAL TO CONGRESS FOR AN APPROPRIATION TO AID IN THE COMPLETION OF THE STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL AND HARBOR, AND TO EXTEND THE TIME FOR THE COMPLETION THEREOF.

To the Senate and House of Representatives of the United States, in Congress assembled:

The memorial of the legislature of the State of Wisconsin respectfully represents: That in the year 1866 Congress made a grant of 200,000 acres of land to the State of Wisconsin to aid in the construction of a ship-canal from Sturgeon Bay to Lake Michigan, and to construct a breakwater and harbor at the mouth of such canal in Lake Michigan; that by the terms of said grant the lands so appropriated could not be used or made available for the commencement of this important work, nor for the prosecution or completion thereof, within the time required; that for the purpose of prosecuting said work the State conferred said grant upon a corporation, created, organized, and known as the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company; that this company has constructed more than one-quarter of said canal, mostly from its own resources and private subscriptions; that said company has exhausted all reasonable efforts to borrow money to prosecute the work by pledging the entire land-grant and canal for security, but owing to the depreciation of said grant, in consequence of the destructive fire of 1871, which destroyed much of the timber thereon, and the unusual terms of the act granting said lands, in authorizing the Government of the United States to take possession of said canal when completed, the company has been unable to raise means to prosecute the work. Your memorialists therefore ask that Congress appropriate the sum of $100,000 to aid in the completion of said canal and harbor, and that the time for completing the same be extended three years from the 1st day of July next.

Approved February 6, 1877.

EXHIBIT K.—LIST OF LANDS SELECTED BY THE CANAL COMPANY APPROVED BY INTERIOR DEPARTMENT MAY 3, 1867.

Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company—list of lands.

List of such tracts of lands selected by the duly authorized agent of the State of Wisconsin as appears vacant and unappropriated and which inure to said State under the act of April 10, 1866, to aid in the construction of a breakwater and harbor and ship-canal to connect the waters of Green Bay with Lake Michigan.

(Here follow descriptions of lands.)
Total, 199,630.98 acres.

DEPARTMENT OF THE INTERIOR,
General Land Office, May 3, 1867.

I, Joseph S. Wilson, Commissioner of the General Land Office, do hereby certify that the foregoing on pages 1 to 43, inclusive, is a true and correct list of such tracts of lands lying on odd sections and found vacant and unappropriated as were selected by the duly authorized agent of the State of Wisconsin under the act of Congress approved April 10, 1866, entitled "An act granting to the State of Wisconsin a donation of public lands to aid in the construction of a breakwater and harbor and ship-canal at the head of Sturgeon Bay, in the county of Door, in said State, to connect the waters of Green Bay with Lake Michigan in said State," the same being a part of the 200,000 acres to which the said State is entitled under the act.

I respectfully recommend that the list be approved, subject to any valid interfering rights which may have existed at the date of selection.

In testimony whereof I have hereunto subscribed my name and caused the seal of the General Land Office to be affixed, at the city of Washington, on the day and year first herein above written.

JOS. S. WILSON,
Commissioner.

[SEAL.]

DEPARTMENT OF THE INTERIOR,
Washington, D. C., May 4, 1867.

Approved, subject to the conditions and rights above mentioned.

W. T. OTTO,
Acting Secretary.

DEPARTMENT OF THE INTERIOR,
General Land Office, May 11, 1867.

I, Joseph S. Wilson, Commissioner of the General Land Office, do hereby certify that the annexed list from pages 1 to 45, inclusive, is a true and liberal exemplification of the original on file in this office.

In testimony whereof I have hereunto subscribed my name and caused the seal of this office to be affixed, at the city of Washington, on the day and year above written.

JOS. S. WILSON,
Commissioner of the General Land Office.

[SEAL.]

UNITED STATES OF AMERICA,
State of Wisconsin, Department of State, ss:

To all to whom these presents shall come:

I, Ernst G. Timme, secretary of state of the State of Wisconsin, do hereby certify that the foregoing copy of certificates of Joseph S. Wilson, Commissioner of the General Land Office, as are attached to approved list of lands donated to aid in the construction of the S. B. and L. M. ship and harbor has been compared by me with the original copy of record and on file in this department, and that the same is a true copy thereof, and of the whole of such original, except as noted.

In testimony whereof I have hereunto set my hand and affixed my official seal, at the capitol, in the city of Madison, this 22d day of October, A. D. 1866.

ERNST G. TIMME,
Secretary of State.

granted by act of Congress are faithfully applied to the construction and completion of the improvement for which they were granted, in a good and workmanlike manner, in accordance with the map, plan, and specifications made by a United States engineer (who is now the engineer of the company), and reported by him to the United States Engineer Corps. This would, of course, include the revetting or docking of the entire length of the canal as contemplated by the original plan, and without which, in our opinion, the canal will never be safely, thoroughly, and permanently completed. Nothing should be omitted which will secure the purpose for which the grant was made by the General Government. Nothing should be exacted of the company which is unnecessary or oppressive to the company.

The legislature of the State of Wisconsin is in duty bound to see that justice is done to both the company and the General Government. It is the guardian of good faith and honor of the State. It is the protector of the rights of the humblest citizen of the State, whether that citizen is an individual or a corporation. It is also the duty of every citizen to obey the laws of the State. One of the duties resting upon the company is to keep its general offices within the State, and it has been so decided, judicially, as will be seen by the following quotation:

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Another is to complete the work in a good and workmanlike manner, according to the purpose of the grant made, and when that work is so completed, or completed proportionally, the company is entitled to receive a ratable proportion of the value of the lands granted, and not before.

To accomplish these purposes, bills No. 97 A and joint resolution No. 15 A should be passed, and we therefore recommend their passage.

All of which is respectfully submitted.

EDWARD C. WALL.
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EXHIBIT I.—MEMORIAL TO CONGRESS FROM LEGISLATURE STATE OF WISCONSIN, FEBRUARY 6, 1877.

MEMORIAL TO CONGRESS FOR AN APPROPRIATION TO AID IN THE COMPLETION OF THE STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL AND HARBOR, AND TO EXTEND THE TIME FOR THE COMPLETION THEREOF.

To the Senate and House of Representatives of the United States, in Congress assembled:

The memorial of the legislature of the State of Wisconsin respectfully represents: That in the year 1866 Congress made a grant of 200,000 acres of land to the State of Wisconsin to aid in the construction of a ship-canal from Sturgeon Bay to Lake Michigan, and to construct a breakwater and harbor at the mouth of such canal in Lake Michigan; that by the terms of said grant the lands so appropriated could not be used or made available for the commencement of this important work, nor for the prosecution or completion thereof, within the time required; that for the purpose of prosecuting said work the State conferred said grant upon a corporation, created, organized, and known as the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company; that this company has constructed more than one-quarter of said canal, mostly from its own resources and private subscriptions; that said company has exhausted all reasonable efforts to borrow money to prosecute the work by pledging the entire land-grant and canal for security, but owing to the depreciation of said grant, in consequence of the destructive fire of 1871, which destroyed much of the timber thereon, and the unusual terms of the act granting said lands, in authorizing the Government of the United States to take possession of said canal when completed, the company has been unable to raise means to prosecute the work. Your memorialists therefore ask that Congress appropriate the sum of $100,000 to aid in the completion of said canal and harbor, and that the time for completing the same be extended three years from the 1st day of July next.

Approved February 6, 1877.

EXHIBIT K.—LIST OF LANDS SELECTED BY THE CANAL COMPANY APPROVED BY INTERIOR DEPARTMENT MAY 3, 1867.

Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company—list of lands.

List of such tracts of lands selected by the duly authorized agent of the State of Wisconsin as appears vacant and unappropriated and which inure to said State under the act of April 10, 1866, to aid in the construction of a breakwater and harbor and ship-canal to connect the waters of Green Bay with Lake Michigan.

(Here follow descriptions of lands.)
Total, 199,630.98 acres.

DEPARTMENT OF THE INTERIOR,
General Land Office, May 3, 1867.

I, Joseph S. Wilson, Commissioner of the General Land Office, do hereby certify that the foregoing on pages 1 to 43, inclusive, is a true and correct list of such tracts of lands lying on odd sections and found vacant and unappropriated as were selected by the duly authorized agent of the State of Wisconsin under the act of Congress approved April 10, 1866, entitled "An act granting to the State of Wisconsin a donation of public lands to aid in the construction of a breakwater and harbor and ship-canal at the head of Sturgeon Bay, in the county of Door, in said State, to connect the waters of Green Bay with Lake Michigan in said State," the same being a part of the 200,000 acres to which the said State is entitled under the act.

I respectfully recommend that the list be approved, subject to any valid interfering rights which may have existed at the date of selection.

In testimony whereof I have hereunto subscribed my name and caused the seal of the General Land Office to be affixed, at the city of Washington, on the day and year first herein above written.

JOS. S. WILSON,
Commissioner.

[SEAL.]

DEPARTMENT OF THE INTERIOR,
Washington, D. C., May 4, 1867.

Approved, subject to the conditions and rights above mentioned.

W. T. OTTO,
Acting Secretary.

DEPARTMENT OF THE INTERIOR,
General Land Office, May 11, 1867.

I, Joseph S. Wilson, Commissioner of the General Land Office, do hereby certify that the annexed list from pages 1 to 45, inclusive, is a true and liberal exemplification of the original on file in this office.

In testimony whereof I have hereunto subscribed my name and caused the seal of this office to be affixed, at the city of Washington, on the day and year above written.

JOS. S. WILSON,
Commissioner of the General Land Office.

[SEAL.]

UNITED STATES OF AMERICA,
State of Wisconsin, Department of State, ss:

To all to whom these presents shall come:

I, Ernst G. Timme, secretary of state of the State of Wisconsin, do hereby certify that the foregoing copy of certificates of Joseph S. Wilson, Commissioner of the General Land Office, as are attached to approved list of lands donated to aid in the construction of the S. B. and L. M. ship and harbor has been compared by me with the original copy of record and on file in this department, and that the same is a true copy thereof, and of the whole of such original, except as noted.

In testimony whereof I have hereunto set my hand and affixed my official seal, at the capitol, in the city of Madison, this 22d day of October, A. D. 1886.

ERNST G. TIMME,
Secretary of State.

EXHIBIT L.—LIST OF LAND SALES.

Abstract of such sales made by the commissioner of school and university lands of the State of Wisconsin to the patent of the lands as were recognized by the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company.

Date of sale by State.	Contract No.	Name.	Number of acres.	Price per acre.	Amount.
1876.					
June 29	1	John Wester, Sturgeon Bay	40.68	$5 00	$200 00
July 1	2	Joseph Martin, Peshtigo	80.00	2 50	200 00
.....	3	Daniel Lynch Askeaton	40.00	5 00	200 00
12	4	George Peltier, Oconto	160.00	3 25	500 00
12	5	Robert Spies, Oconto	40.00	4 50	180 00
18	6	Robert Logan, Jacksonport	68.80	3 00	206 40
18	7	Robert Carson, Maplewood	40.00	5 00	200 00
18	8	Dugald Gilbraith, Jacksonport	40.00	4 00	160 00
21	9	P. G. Hibbard, Jacksonport	40.00	5 50	220 00
27	10	Madts Isaacson, Pulcifer	40.00	2 50	100 00
Aug. 1	11	Antoine Mahomet, Brussels	40.00	3 00	120 00
1	12	Joseph Fumal, Brussels	80.00	2 50	200 00
16	13	Frank Peltke, Oconto	80.00	2 50	200 00
21	12	Herman Jandry, Oconto	40.00	3 00	120 00
22	15	J. G. Wallin, Menekaunee	54.14	2 50	135 35
Sept. 1	16	Hans Melander, Menekaunee	94.64	2 50	237 50
Aug. 25	17	Peter Augwell, Menekaunee	60.62	2 50	151 55
Sept. 14	18	Henry Evans, Marinette	40.00	2 50	100 00
22	20	Scofield & Co., Sturgeon Bay	120.00	2 50	300 00
23	21	John M. Vedder, Oconto	40.00	2 50	100 00
18	22	F. B. Gardner, Pensaukee	40.00	2 50	100 00
19	23	Joseph Goetz, Manitowoc	118.41	2 50	360 00
20	24	George Bassford, Sturgeon Bay	40.00	7 50	300 00
22	25	John Leathem, Sturgeon Bay	80.00	2 50	200 00
22	26	James Fletcher, Bailey's Harbor	40.00	2 50	100 00
23	27	Isaac Dickie, Saint Nathans	40.00	5 00	200 00
27	28	P. A. Doran, Big Suamico	80.00	2 50	280 00
Dec. 2	30	John Watson, Saint Nathans	80.00	4 00	320 00
2	31	W. H. Warner, Saint Nathans	80.00	4 00	320 00
9	32	August Braach, Oconto	40.00	2 50	100 00
11	33	A. G. Brooks, Peshtigo	40.00	2 50	100 00
23	34	William Squires, Peshtigo	44.00	2 50	110 23
1877.					
Jan. 1	35	John C. Wezenaar, Marinette	40.00	2 50	100 00
1	36	Joseph Wilmot, Pierce, Wis	40.00	2 50	100 00
1	37	Jacob Olson, Sister Bay	63.20	2 50	158 00
5	38	William Moore, Forestville	40.00	2 50	100 00
8	39	William Treckloffe, West Pensaukee	40.00	2 50	100 00
10	40	William McKenney, Maple Valley	80.00	3 00	240 00
15	41	Charles Schrœder, Pensaukee	40.00	3 50	140 00
15	42	Frederick Utteck, Ephraim, Wis	40.00	2 50	100 00
15	43	Edward Strange, Ephraim, Wis	40.00	2 50	100 00
5	44	M. H. Borgman, Carlton	80.00	2 50	200 00
5	45	Thomas Masterson, Peshtigo	80.00	2 50	200 00
10	46	Lacapatine & Massart, Lincoln	80.00	2 50	200 00
10	47	Ferdinand Berr, sr., Saint Nathans	80.00	2 80	224 00
13	48	Thomas Deacon, Oconto	40.00	2 50	100 00
17	49	Patrick Shea, Franklin	40.00	2 50	100 00
17	50	Winzel Nimitz, Franklin	40.00	2 50	100 00
20	51	Albert Schmidt, Ephraim	80.00	2 50	200 00
24	52	Peter Mogland, Fortenoy	40.00	2 50	100 00
26	53	Henry Strange, Ephraim	40.00	2 50	100 00
Mar. 1	54	Jacob Rawn, Marinette	40.00	3 75	150 00
5	55	John Ellison, Ephraim	80.00	2 50	200 03
20	56	William Paddleford, Kewaunee	37.73	2 50	94 30
20	57	Francis Lagrave, Rosiere	40.00	2 50	100 00
22	59	A. Anderson, Ephraim	80.00	2 50	200 03
26	60	Cornelius O'Brien, Franklin	40.73	2 50	101 83
31	61	Michael Lawler, Franklin	38.27	2 50	95 68
April 7	62	George W. Lee, Peshtigo	40.00	2 50	100 00
16	63	Ole Nelson, Warren's Corners	40.00	2 50	100 00
16	64	Ludwig Frank, Peshtigo	80.00	2 50	200 00
21	65	John Bassford, Sevastopol	40.00	2 50	100 00
23	66	John McGinness, Maple Valley	40.00	2 50	100 00
23	67	O. Lezeme Lamay, Oconto	40.00	3 00	120 00
25	68	Henry Tourtillot, Oconto	40.00	3 25	130 00
25	69	Joseph Funston, Peshtigo	147.00	2 50	367 50
27	70	Anne Arneson, Clay Banks	40.00	2 50	100 00

Abstract of sales made by the commissioner of school and and university lands of the State of Wisconsin, &c.—Continued.

Date of sale by State.	Contract No.	Name.	Number of acres.	Price per acre.	Amount.
1877.					
May 1	71	Walter Druery, Peshtigo	40.00	$2 25	$130 00
7	72	Frank Helmer, Oconto	40.00	2 50	100 00
8	73	F. F. Massart, Lincoln	35.68	2 50	89 20
9	74	B. J. Erskine, Jacksonport	40.00	2 50	100 00
12	75	Edward W. Swayne, Jacksonport	40.00	3 00	120 00
16	76	Andrew Olson, Marinette	80.00	2 75	220 00
18	77	Francis Francisco, Peshtigo	40.00	3 50	100 00
26	78	Dugald Gilbreath, Jacksonport	40.00	2 50	100 00
26	79	Theodore Libotte, Brussels	40.00	2 75	110 00
26	80	Thomas Mills, Maple Valley	40.00	3 00	120 00
30	81	G. Seitel, Sister Bay	40.00	2 50	100 00
June 2	82	Mathew Mallony, Peshtigo	160.00	2 50	400 00
6	83	Nicholas Murphey, Cooperstown	78.85	2 50	197 13
8	84	John Bley, Jacksonport	40.00	3 00	120 00
18	85	Frank Bernardy, Marinette	40.00	2 50	100 00
July 5	86	Emile Coisman, Brussels	40.00	2 75	110 00
5	87	Albert Utteck, Ephraim	40.00	2 50	100 00
12	88	P. W. Haney, Oconto Falls	160.00	2 75	440 00
15	89	David Pecor, Oconto	40.00	2 75	110 00
26	90	John Smith, Egg Harbor *	40.00	2 50	†100 00
30	91	Jesse Williams, Egg Harbor	40.00	2 50	100 00
Aug. 22	92	Richard Fitzgerald, Stiles	80.00	3 00	240 00
Oct. 3	93	Isiah Post, Maple Valley	40.00	3 00	120 00
1878.					
Jan. 3	94	John Kelley, Oconto	80.00	3 50	260 00
			5,202 84		14,988 70

*Forfeited to company. † Foreclosed.

Abstract of land sales made by the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company.

Date of contract	No. of contract.	Sold to—	Number of acres.	Price paid per acre.	Amount.
1877.					
Apr. 25	.....	James McGregor, Peshtigo	240.00	$4 96	$1,190 00
25	.....	John Leigh, Oconto	80.00	2 56	205 00
25	.....	S. A. Coleman, Oconto	495.85	5 34	2,645 00
25	.....	Fred. Carney, Marinette	80.00	1 88	150 00
25	.....	Isaac Stephenson, Marinette	440.00	6 40	2,900 00
25	.....	Ferd. Armstrong, Peshtigo	160.00	3 56	570 00
25	.....	W. A. Ellis, Peshtigo	326.98	4 22	1,380 00
25	.....	W. A. Ellis, and James McGregor, Peshtigo	320.00	4 72	1,510 00
25	.....	H. Witbeck Company, Marinette	520.00	4 98	2,590 00
25	.....	The Hamilton Merriman Company	600.00	4 17	2,500 00
25	.....	J. S. McDonald and H. G. Billings, Fond du Lac	2,612.63	5 09	13,301 00
25	.....	The Peshtigo Company, Chicago	2,781.34	4 79	13,325 00
25	.....	Holt & Balcom, Chicago	2,803.12	5 58	15,655 00
25	.....	The Ludington Wells and United States Company, Chicago	600.00	5 83	3,500 00
June 19	.....	W. J. Ellis and W. J. Sheppard, Peshtigo	320.00	5 00	1,600 00
July 4	.....	W. A. Ellis and James McGregor, Peshtigo	40.00	3 25	130 00
9	.....	N. Ludington Company, Marinette	11,448.05	3 00	34,344 15
Oct. 23	.....	John Leigh, Oconto	120.00	2 50	300 00
23	.....	Holt & Balcom, Chicago	561.15	8 34	4,685 00
23	.....	Kirby Carpenter Company, Menomonee	520.00	5 25	2,750 00
23	.....	F. J. Bartele, Peshtigo	593.74	3 44	2,050 00
23	.....	W. A. Ellis, Peshtigo	434.75	3 48	1,535 00
23	.....	Do	80.00	4 00	320 00
Dec. 18	.....	A. Richards, Oconto	80.00	3 75	300 00

Abstract of land sales made by the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company—Continued.

Date of contract.	No. of contract.	Sold to—	Number of acres.	Price paid per acre.	Amount.
1878.					
Jan. 2	11	Holt & Balcom	560.00	$3 21	$1,800 00
Feb. 2	12	Joseph Laer, Oconto	80.00	3 03	243 00
15	13	W. A. Ellis, Peshtigo	81.41	4 48	365 00
Mar. 7	14	F. J. Bartels, Peshtigo	101.21	3 45	350 00
May 7	1	Christian Poehl, Ahnepee	40.00	5 25	210 00
7	*	Frank Kwapel, Ahnepee	122.22	1 33	162 77
7	2	John Gregor, Ahnepee	40.00	4 50	180 00
7	3	John Cramer, jr., Sturgeon Bay	40.00	1 25	50 00
7	4	John Bley, Jacksonport	40.00	2 00	80 00
7	5	Hurbert Leroy, Brussels	80.09	2 00	162 00
7	*	W. Bassford, Sevastopol	40.00	1 25	50 00
7	6	Felix Englebert, Brussels	39.96	2 00	80 00
7	7	Alexis Franc, Brussels	40.00	3 00	120 00
7	8	Diedrich Bause, Kewaunee	40.00	11 37	455 00
7	9	John Madden, sr., Warren C	80.00	6 25	500 00
7	10	John Brand, Bailey Harbor	40.00	4 00	160 00
7	11	Henry Buschmann, Sawyer	40.00	2 00	80 00
7	12	William McGovern, Sevastopol	40.00	5 00	200 00
7	*	Charles Fellows, Ahnepee	40.00	1 25	50 00
7	*	E. C. Daniels, Sturgeon Bay	43.00	2 50	107 50
7	*	C. Leonhardt, Sturgeon Bay	40.51	50	20 25
7	13	K. O. Shellswick, Washington A	40.00	1 00	40 00
7	14	Frank Kwapel, Ahnepee	40.00	5 00	200 00
7	15	Allen Higgins, Bailey's H	116.50	1 53	178 32
7	16	Feldman & Cochems, Sturgeon Bay	40.00	2 25	90 00
7	17	John Leathem, Sturgeon Bay	40.00	5 62	225 00
7	18	John Rottman, Sister Bay	40.00	2 00	80 00
7	19	John Leathem, Sturgeon Bay	40.00	3 50	140 00
7	20	Henry Johnson, Washington H	120.00	2 00	240 00
7	21	Henry Wilson, Jacksonport	40.00	3 00	120 00
10	(†)	Henry Kampka, Oconto	40.00	4 00	160 00
10	(†)	Gootfried Kruger, Oconto	80.00	7 94	635 00
10	(†)	James W. Moore, Marinette	40.00	1 50	60 00
10	(†)	William McCartney, Marinette	200.00	3 67	735 00
10	(†)	N. Ludington Co., Marinette	160.00	1 41	225 00
10	(†)	William S. Baker, Marinette	80.00	50	40 00
10	(†)	W. J. Shepherd and W. A. Ellis, Peshtigo	80.00	1 56	125 00
10	(†)	Fred. Warnke, Marinette	41.44	2 50	103 60
10	(†)	H. Witbeck & Co., Marinette	160.00	6 22	925 00
10	23	J. W. Couillard, Oconto	280.00	3 61	1,010 00
10	24	O. C. Jacobson, Menomonee	160.00	3 00	480 00
10	.....	Robert Hagen, Peshtigo	80.00	2 12	170 00
10	.....	Ludwig Frank, Peshtigo	162.81	2 00	325 62
10	.....	George T. Porter, Oconto	242.32	3 13	760 00
10	.....	W. A. Ellis and F. Armstrong, Peshtigo	1,392.19	2 80	3,903 56
10	.....	F. J. Bartels, Peshtigo	200.00	2 92	585 00
10	.....	Peshtigo Company, Chicago	800.00	5 00	4,000 00
10	.....	Holt & Balcom, Chicago	760.00	2 70	2,050 00
10	.....	Kirby Carpenter Co., Chicago	987.84	2 24	2,209 60
14	(†)	Cowen W. Halsted	80.00	50	40 00
14	(†)	John Dinse, Oconto	80.00	3 25	260 00
14	40	E. T. Warner, Oconto Falls	40.00	4 00	160 00
14	57	John C. Banta, Oconto Falls	120.00	5 33	640 00
14	32	John James Flatley, Oconto Falls	40.00	3 00	120 00
14	33	Gustaf Seefeldt, Peshtigo	40.00	1 50	60 00
14	34	Rodney A. Rice, Oconto Falls	40.00	4 00	160 00
14	35	John Driscoll, Oconto Falls	80.00	1 25	100 00
14	36	Franz Jungemann, Oconto	40.00	1 50	60 00
14	37	Gustaf Wiance, Oconto	40.00	2 00	80 00
14	38	William Mills, Oconto	40.00	2 50	100 00
14	39	Francis X. Brazeau, Oconto	78.12	1 25	97 65
14	41	Peter Burreby, Saint Nathans	62.31	1 25	77 89
14	42	John Major, Saint Nathans	40.31	2 50	100 77
14	43	Isaac Tillitier, Oconto	40.00	2 50	100 00
14	44	Joseph Harxan, Oconto	37.19	2 50	92 97
14	45	Bert Christopherson, Saint Nathans	40.00	6 00	240 00
14	46	John Lamay, Oconto	40.00	3 00	120 00
14	47	John Pashek, Oconto	80.00	2 50	200 00
14	48	Charles Rodgers, Oconto	80.00	6 00	480 00
14	49	Irwin Cleveland, Saint Nathans	40.00	6 00	240 00
14	50	Thomas Tunnay, Oconto	40.00	4 00	160 00
14	51	James Kadlic, Oconto	80.00	1 75	140 00
14	52	Joseph Kadlic, Oconto	80.00	2 50	200 00
14	53	John Ceota, Oconto	78.04	1 25	97 55

* Cash deed.
† Deed.

Abstract of land sales made by the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company—Continued.

Date of contract.	No. of contract.	Sold to—	Number of acres.	Price paid per acre.	Amount.
1878.					
May 14	54	Joseph Hausner, Oconto	80.00	$1 75	$140 00
14	55	Patrick Corcoran, Oconto	40.00	2 00	80 00
14	56	Frederick Ubare, Oconto	40.00	2 50	100 00
15	58	Lidia F. Lockart, Maplewood	39.38	2 00	78 76
24	59	Thor. Holdorson, Warrens C	40.00	5 00	200 00
24	60	Joseph Slatke, Oconto County	80.00	2 50	200 00
27	61	John Cook, Suamico	40.00	25	10 00
28	62	Charles L. Brown, Peshtigo	40.00	2 00	80 00
30	63	John Schlage, Oconto	80.00	1 25	100 00
31	64	Joseph Pavlott, Oconto County	80.00	1 25	100 00
31	65	Joseph Dionne, Oconto	200.00	2 50	500 00
31	66	Jacob Skardi, Oconto	80.00	2 25	180 00
31	67	John McLean, Oconto	40.00	1 75	140 00
June 1	68	George Cadieu, Marinette	40.00	2 50	100 00
3	69	Scofield & Co., Sturgeon Bay	40.00	2 00	80 00
4	70	N. C. Gilkey, Oconto	247.78	1 65	409 70
6	71	F. J. Bartels, Peshtigo	160.00	2 23	335 00
6	72	C. Leonhardt, Sturgeon Bay	40.00	2 00	80 02
6	73	Albert Richard, Oconto	200.00	4 85	970 00
8	74	F. J. Bartels Peshtigo	80.00	1 37	110 00
18	75	George and Joseph Kell, Oconto	40.00	3 50	140 00
20	76	N. Ludington Co., Marinette	120.00	8 16	980 00
21	77	George Beyer, Oconto	40.00	2 50	100 00
22	78	A. A. True, Peshtigo	40.00	2 50	100 00
22	79	F. J. Bartels, Peshtigo	40.00	1 25	50 00
25	80	Englehart & Francois, Brussels	40.00	2 00	80 00
25	81	Max Furnal, Oconto	40.00	2 50	100 00
27	82	C. Feldman, Sturgeon Bay	65.00	3 00	195 00
29	83	Mrs. Marie L. Gross, Little Suamico	40.00	50	20 00
July 10	84	A. Gonyon, Oconto	40.00	1 75	70 00
20	85	James Mason, Peshtigo	159.34	3 26	520 30
20	86	George T. Porter, Oconto	30.00	6 03	500 00
23	87	Albert Richard, Oconto	40.00	3 75	150 09
23	88	James McGregor, Peshtigo	280.00	3 10	870 00
Aug. 2	89	Christian O. Pederson, Washington Harbor	80.00	2 00	160 00
2	90	Samuel G. May, Peshtigo	53.40	5 00	267 45
5	91	Lucius E. Fletcher, Peshtigo	34.60	4 50	155 70
7	92	Jesse Williams, Egg Harbor	40.00	2 00	80 00
8	93	Ridolf Klarrter, Peshtigo	40.00	2 50	100 00
2	94	F. J. Bartels, Peshtigo	40.00	1 25	50 00
10	95	....do....	90.59	2 37	214 84
20	96	William Plain, Oconto	40.00	5 62	225 00
21	97	Emanuel Davidson, Washington Harbor	80.00	2 50	200 00
22	98	W. Marshall and H. Jacobson, Sister Bay	120.00	3 41	409 31
27	99	John Morrison, Oconto	120.00	1 58	190 00
29	100	F. Armstrong, Peshtigo	40.00	3 25	130 00
Sept. 4	101	C. O. Pederson, Washington Harbor	40.00	2 00	80 00
4	102	Edward Madden, Brown County	40.00	2 50	100 00
6	103	Nick Amburst, Sevastopol	40.00	3 00	120 00
Aug. 16	104	F. J. Bartels, Peshtigo	80.00	2 37	190 00
Sept. 17	105	Herman Christol, Peshtigo	80.00	2 50	200 00
24	106	John Sheridan, Oconto	240.00	6 66	1,600 00
30	107	Oliver LeClair, Mishicott	80.00	5 00	400 00
Oct. 5	108	Joseph LeClair and H. Tibbets, Oconto	80.00	1 25	100 00
29	109	Alois Habvili, Sturgeon Bay	80.00	3 00	240 00
29	110	V. LeClair and B. F. Hunt, Ellison Bay	40.00	3 00	120 00
30	111	Ferdinand Armstrong, Peshtigo	381.16	1 35	517 88
30	112	Holt & Balcom, Chicago	360.00	1 79	645 00
31	113	H. McDermit, Saint Nathans	40.00	3 00	120 00
31	114	John Pelow, Saint Nathans	40.00	3 50	140 00
31	115	John Carroll, Oconto Falls	40.00	2 50	100 00
31	116	Thos. Chesley, Oconto	40.00	2 00	80 00
31	117	Harlow Carpenter, Kewaunee	74.07	2 00	185 17
31	118	S. A. Coleman, Oconto	160.00	2 59	415 00
30	112	N. Ludington Co., Marinette	40.00	1 25	50 00
Sept. 25	120	Miner & Blakefield, Fish Creek	39.90	3 00	119 70
Nov. 18	121	J. T. Engbug, Pensaukee	40.00	50	40 00
19	122	S. A. Coleman, Oconto	240.00	4 56	1,095 00
23	123	G. T. Porter, Oconto	130.32	2 50	327 05
25	124	Oscar Haines, Sawyer	80.00	1 25	120 00
Dec. 2	125	Maximilian Charlie, Ahnepee	40.00	3 75	150 00
2	126	David Tills, Manitowoc	80.00	2 50	200 00
3	127	A. G. Brooks, Peshtigo	40.00	3 00	120 00
4	128	Frank Linerville, Oconto	64.53	3 00	193 59
5	129	S. A. Coleman, Oconto	461.92	3 24	1,500 00
11	130	Joseph Marek, Oconto	40.00	1 25	50 00
12	131	GeorgePaukratz, Manitowoc	40.00	1 25	50 00

Abstract of land sales made by the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company—Continued.

Date of contract.	No. of contract.	Sold to—	Number of acres.	Price paid per acre.	Amount.
1878.					
Dec. 14	132	T. C. Sharpe, Elkhart Lake	40.00	$2 00	$80 00
13	133	W. A. Ellis, Peshtigo	120.00	2 00	243 00
16	134	Edgar Annis, Peshtigo	40.00	2 50	100 00
6	135	Francis Rabevor, Middle Sturgeon	40.00	2 00	80 00
14	136	John Stuart, Peshtigo	40.00	2 61	104 65
21	137	Julius F. Retkee, Marinette	40.00	2 00	80 00
23	138	Carl Zahn, Sturgeon Bay	40.00	2 00	80 00
27	139	James Mason, Peshtigo	40.00	2 99	120 00
27	140	Chas. J. Waldron, Oconto	40.00	2 00	80 00
27	141	V. Votava, Oconto	40.00	1 00	40 00
1879.					
Jan. 22	142	T. A. Coleman, Oconto	480.00	2 83	1,361 00
22	143	F. J. Bartels, Peshtigo	280.00	1 80	504 00
22	144	Sophia Poehl, Ahnepee	40.00	3 50	140 00
Feb. 7	145	Henry McNally, Peshtigo	40.00	2 50	100 00
8	146	W. A. Ellis, Peshtigo	40.00	1 50	60 00
15	147	Agnes McKinley, Oconto, Wis	40.00	2 50	100 00
15	148	Oliver Vranken, Brussell	40.00	3 00	120 00
15	149	N. Ludington Company, Marinette	251.80	1 27	322 03
Jan. 10	150	L. Balza, Brussell	40.00	2 00	80 00
Mar. 11	151	Hugh Early, Little Suamico	40.00	50	20 00
26	152	James Mason and P. Noll, Peshtigo	316.34	1 93	611 92
Apr. 8	153	F. J. Bartels, Peshtigo	40.00	1 12½	45 00
8	154	T. J. O. Donnell, Peshtigo	40.00	1 12½	45 00
9	155	John Carroll, Oconto Falls	40.00	2 50	100 00
23	156	Levi Cleveland, Saint Nathans	40.00	3 50	140 00
29	157	F. Armstron and T. B. McAlpine, Peshtigo	223.32	2 95	2,000 00
May 1	158	George H. Thorp, Fish Creek	80.00	3 00	240 00
2	159	N. C. Gilkey, Oconto	40.00	1 35	54 00
12	160	Peter Lauscher, Sturgeon Bay	40.00	1 35	54 00
17	161	George Beyer, Oconto	40.00	2 50	100 00
21	162	J. J. Barringer, Egg Harbor	40.00	3 00	120 00
15	163	David Tells, Manitowoc Rapids	40.00	1 50	60 00
27	164	Charles H. Mueller, Port Washington	40.00	2 50	100 00
June 4	165	Odilon Brault, Peshtigo	80.00	3 12½	250 00
9	166	Armidase Gibeau, Peshtigo	71.40	3 12½	223 13
10	167	Julius Schlief, West Pensaukee	40.00	6 00	240 00
16	168	James O'Neill, Peshtigo	40.00	1 12½	45 00
16	169	N. C. Gilkey, Oconto	40.00	2 50	180 00
16	170	Two Rivers Manufacturing Company	678.09	3 04	2,066 00
19	171	Emanuel Hogan, Jascksonport	40.00	2 00	80 00
19	172	Thomas Root, Bailey's Harbor	40.00	2 50	100 00
23	173	John Stevenson, Little Sturgeon	40.00	2 50	100 00
July 2	174	Joseph Laer, Oconto	219.51	45	100 00
6	175	Ferdinand Trepto, Peshtigo	80.00	2 26	180 00
9	176	William McGovern, Jacksonport	40.00	1 25	50 00
17	177	E. C. Daniels, Sturgeon Bay	40.00	1 25	50 00
19	178	Two Rivers Manufacturing Company	588.88	1 94	1,144 00
14	179	Charles Meyers, Marinette	40.00	4 00	160 00
31	180	John C. Wezenaar, Marinette	40.00	1 00	40 00
Aug. 6	181	Henry Uhl, Peshtigo	40.00	1 50	60 00
2	182	John McDermett, West Pensaukee	80.00	4 27	342 00
14	183	Chris. Johnson, Oconto	40.00	2 50	100 00
16	184	Lars Gudmunson, Washington Id	80.00	1 37	110 00
Sept. 25	185	E C. Daniels, Sturgeon Bay	164.83	2 29	371 00
25	186	H. Larson & M. Shine, Jacksonport	82.96	97	80 00
25	187	E. C. Daniels & L. M. Washburn, Sturgeon Bay	80.00	3 62	290 00
25	188	J. A. Defaut, Jacksonport	40.00	2 00	80 00
25	189	N. N. Cromwell, Jacksonport	40.00	1 80	72 00
25	190	George Harvers, Bailey's Harbor	40.00	2 70	108 00
25	191	J. J. Barringer, Egg Harbor	40.00	2 70	108 00
25	192	Christain Hempel, Ephraim	80.00	1 00	80 00
25	193	John Leathem, Sturgeon Bay	80.00	90	72 00
26	194	Holt & Balcom, Chicago	901.98	2 12	1,923 00
26	195	G. T. Porter, Oconto	560.00	3 51	1,970 00
26	196	N. C. Gilkey, Oconto	80.00	3 43	275 00
26	197	Gustave Rust, Peshtigo	40.00	90	36 00
26	198	Samnel G. May, Peshtigo	32.32	3 00	97 00
26	199	John Frank, Peshtigo	85.69	1 86	160 00
26	200	Peter Leach, Peshtigo	53.34	37	20 00
26	201	Andrew Oleson, Marinette	40.00	1 75	70 00
26	202	Hans Hermanson, Marinette	40.00	1 75	70 00
26	203	John C. Wezenaar, Marinette	80.00	35	28 00
26	204	N. Ludington & Co., Marinette	680.00	2 32	1,580 00
26	205	George T. Pease, Marinette	36.70	2 04	75 00
27	206	Alfred Couture, Oconto	80.00	1 50	120 00
27	207	Emily T. Hubbell, Oconto	171.90	61	106 00
27	208	John Bradley, Oconto	40.00	25	10 00

Abstract of land sales made by the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company—Continued.

Date of contract.	No. of contract.	Sold to—	Number of acres.	Price paid per acre.	Amount.
1879.					
Sept. 27	209	Peter Dionne, Oconto	40.00	$2 25	$90 00
27	210	Joseph Dionne, Oconto	40.00	2 25	90 00
27	211	Richard Cashman, Oconto	40.00	2 70	108 00
27	212	Brazeau Bros., Oconto	40.00	1 80	72 00
27	213	Herman Jandry, Peshtigo	80.00	45	36 00
27	214	Edward Caya, Oconto	104.77	91	96 00
27	215	Charles Kopischke, Peshtigo	40.00	1 80	72 00
27	216	Robert B. Taylor, Oconto	40.00	2 25	90 00
27	217	Jacob Skardi, Oconto	80.00	1 12	90 00
27	218	F. J. Bartels, Peshtigo	856.33	1 06	910 00
27	219	S. A. Coleman, Oconto	160.00	66	106 00
30	220	S. Hamilton & P. Noll, Peshtigo	80.00	2 75	220 00
Oct. 3	221	Archibald McGregor, Peshtigo	80.00	4 75	380 00
3	222	James Mason, Peshtigo	40.00	2 25	90 00
7	223	Andrew Nelson, Peshtigo	40.00	2 25	90 00
7	224	N. C. Gilkey, Oconto	40.00	1 87	75 00
7	225	Charles D. Porter, Oconto	398.95	1 43	573 60
7	226	W. A. Ellis, Peshtigo	1,409.20	65	929 00
7	227	N. C. Gilkey, Oconto	40.00	1 50	60 00
8	228	.....do	80.00	1 62	130 00
10	229	James Bush, Marinette	80.00	81	65 00
14	230	W. A. Ellis, Peshtigo	240.00	1 41	340 00
16	231	Charles Labs, Peshtigo	42.88	1 88	80 00
16	232	Charles Wise, Oconto	40.00	45	18 00
16	233	Gottlieb Schauer, Peshtigo	45.81	43	20 00
17	234	N. Ludington Company, Marinette	963.56	1 11	1,070 00
20	235	W. A. Ellis, Peshtigo	40.00	1 25	50 00
20	236	Charles R. Anderson, Oconto	40.00	45	18 00
21	237	George Cleveland, Saint Nathans	80.00	2 93	234 00
23	238	Camille Gamelin, Marinette	40.00	2 00	80 00
25	239	Edward Morrisey, Oconto	40.00	2 25	90 00
27	240	Holt & Balcom, Chicago	280.69	1 70	476 00
27	241	S. A. Coleman, Oconto	159.44	2 29	365 00
28	242	Jacob Raun, Marinette	80.00	1 00	80 00
28	243	Hans Ellingson, Peshtigo	40.00	2 02	81 00
29	244	Henry Larson, Jacksonport	43.07	92	40 00
31	245	Simon & Edward Isaacson, Pulcifer	80.00	1 12½	90 00
31	246	Mathias Paredek, Oconto	80.00	1 12½	90 00
Nov. 1	247	Martin Echtner, Oconto	40.00	1 80	72 00
3	248	Michael Farrel, Lena Post-office	40.00	2 25	90 00
4	249	W. A. Ellis, Peshtigo	80.00	2 50	360 00
4	250	F. R. Allen, Oconto	40.00	2 25	90 00
4	251	George O. Spear, Sturgeon Bay	80.00	1 37	110 00
5	252	Martin Dehos, Sawyer	40.00	2 70	108 00
5	253	S. A. Coleman, Oconto	240.00	3 11	757 00
5	254	J. T. Bagnall, Jacksonport	80.00	1 80	144 00
5	255	Aug. Breeckner, Oconto	40.00	1 50	60 00
8	256	Charles A. Lepinskey, Peshtigo	40.00	1 12½	45 00
8	257	Arne Oleson, Sturgeon Bay	40.00	7 50	300 00
10	258	Ellis & McGregor, Peshtigo	80.00	4 87	390 00
11	259	Soren Peterson, Pulcifer	40.00	90	36 00
11	260	George W. DeLane, Brookside	40.00	90	36 00
12	261	Wolf Rote, Jacksonport	40.89	2 69	110 00
12	262	Angus McAllister, Oconto	68.63	1 82	125 00
12	263	Timothy Thomas, Oconto	40.00	1 12½	45 00
13	264	S. A. Coleman, Oconto	120.00	1 00	120 00
14	265	McDonald and Billings Lumber Company, Oconto	40.00	1 25	50 00
15	266	J. T. Engbug, Oconto	40.00	45	18 00
18	267	John Junger, Oconto	80.00	1 35	108 00
18	268	O. A. Ellis, Oconto	200.00	2 20	440 00
19	269	Peter Closson, Peshtigo	40.00	2 25	90 00
19	270	Adelia M. Halsted, Oconto	40.00	2 70	108 00
19	271	.....do	40.00	1 80	72 00
20	272	W. A. Ellis, Peshtigo	200.00	1 90	380 00
26	273	N. C. Gilkey, Oconto	40.00	2 50	100 00
26	274	M. Sonkop & J. Bolak, Sturgeon Bay	40.00	2 70	108 00
28	275	John Lehsing, Sturgeon Bay	40.00	2 70	108 00
28	276	William Stubber, Forestville	40.00	2 50	100 00
29	277	James Kadlick, Oconto	40.00	1 12½	45 00
29	278	Nicholas Mares, Sturgeon Bay	40.00	2 70	108 00
Dec. 3	280	Henry Dickson, Jacksonport	40.00	2 25	90 00
3	281	Louis Martanson, Jacksonport	80.00	1 80	144 00
4	282	Menominee River Manufacturing Company, Marinette	120.00	1 50	180 00
4	283	F. Armstrong, Peshtigo	40.00	1 75	70 00
4	284	Holt & Balcom, Chicago	360.00	97	350 00
6	285	H. L. Weed, Peshtigo	168.18	2 58	436 00
8	286	Carl Manske, Marinette	40.00	1 80	72 00

Abstract of land sales made by the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company—Continued.

Date of contract.	No. of contract.	Sold to—	Number of acres.	Price paid per acre.	Amount.
1879.					
Dec. 8	288	J. L. Newton, Peshtigo	80.00	$2 50	$200 00
10	289	M. Eckart and J. Klaubauf, Sturgeon Bay	40.00	2 70	108 00
13	290	John Lachapella, Peshtigo	80.00	1 70	136 00
13	291	A. D. Thorp, Sturgeon Bay	43.00	50	21 00
15	292	W. A. Ellis, Peshtigo	178.63	75	135 00
15	293	Andrew H. Fraunes, Shawano	120.00	90	108 00
16	294	Ernst Fitzman, Forest Junction	80.00	2 37	190 00
17	295	Joseph Wood, Jacksonport	40.00	2 70	108 00
17	296	Andrew Gunderson, Sheboygan	80.00	2 25	180 00
17	297	Philip A. Schaefer, Sawyer	80.00	1 35	108 00
18	298	W. A. Ellis, Peshtigo	160.00	2 31	370 00
20	299	James McGregor, Peshtigo	40.00	2 00	80 00
20	300	Matt. Cochems, Sturgeon Bay	40.00	1 10	44 00
22	301	F. J. Bartels, Peshtigo	80.00	1 31	105 00
23	302	John Mullen, Sturgeon Bay	40.00	2 70	108 00
24	303	Simon & Ed. Isaacson, Angelica	40.00	1 12½	45 00
24	304	George R. Marlet, Oconto	80.00	3 93	306 00
26	305	S. A. Coleman, Oconto	40.00	2 00	80 00
27	306	George Barringer, Egg Harbor	40.00	2 70	108 00
29	307	A. W. Lorence & Co., Sturgeon Bay	41.50	2 72	113 00
1880.					
Jan. 2	279	Sarah J. F. Baker, Marinette	40.00	2 75	110 00
2	308	Joseph Smith, Jacksonport	40.00	1 00	40 00
2	309	Charles Kleinert, Peshtigo	40.00	2 25	90 00
8	310	Andrew Oleson, Oconto Falls	80.00	1 80	*144 00
9	311	Eleanor Gifford, Oconto	40.00	5 40	216 00
10	312	Gottfried Koch, Milwaukee	80.00	2 70	216 00
15	313	C. M. Chase and E. C. Daniels, Sturgeon Bay	40.00	1 80	72 00
16	314	Isaac A. Isaacson, Pulcifer	40.00	1 12½	45 00
17	315	S. A. Coleman, Oconto	80.00	4 25	340 00
19	316	F. J. Bartels, Peshtigo	40.00	1 25	50 00
21	317	Louis Bourque, Oconto	40.00	1 50	60 00
22	318	James Johnson, Oconto	80.00	1 12½	90 00
22	319	M. Hannan, Sturgeon Bay	40.00	1 80	72 00
28	320	C. S. Hart, Oconto	40.00	45	18 00
29	321	F. J. Bartels, Peshtigo	80.00	1 00	80 00
30	322	W. A. Ellis, Peshtigo	40.00	2 25	90 00
Feb. 6	323	Holt & Balcom, Chicago	80.00	55	44 00
6	324	Chris Leonhardt, Sturgeon Bay	39.30	91	36 00
7	325	F. Armstrong and S. Hamilton, Peshtigo	278.96	1 69	470 00
9	326	N. Ludington Co., Marinette	200.00	1 55	210 00
11	327	John Anderson, sr., Peshtigo	80.00	1 12½	90 00
12	328	T. Dollan and J. M. Gregor, Peshtigo	240.00	1 35	325 00
14	329	E. C. Daniels, Sturgeon Bay	40.00	90	36 00
16	330	E. T. Hubbell and F. Hoeffel, Oconto	122.50	59	73 00
17	331	Daniel St. Ores, Gillett Centre	40.00	45	18 00
18	332	Frank Porter, Little Suamico	40.00	1 12½	45 00
22	333	Charles Krueger, Peshtigo	45.92	43	20 00
20	334	S. A. Coleman, Oconto	200.00	1 42	285 00
25	335	Louise J. Bartels, Peshtigo	120.00	1 20	145 00
26	336	D. G. Powers, Milwaukee	66.75	10½	10 00
27	337	S. A. Coleman, Oconto	160.00	81	130,00
28	338	------do------	200.00	2 02½	405 00
Mar. 2	339	F. J. Bartels, Peshtigo	80.00	3 75	300 00
4	340	W. J. Carroll, Oconto	40.00	4 05	162 00
6	341	H. A. McKenzie, Green Bay	40.00	1 25	50 00
9	342	Andrew Johnson, Oconto	40.00	2 25	90 00
10	343	S. A. Coleman, Oconto	520.00	2 39	1,245 00
13	344	Jacob W. Couillard, Oconto	40.00	1 87	75 00
13	345	C. A. Masse, Sturgeon Bay	159.76	2 70	432 00
13	346	George Page, Sevastopol	40.00	1 80	72 00
16	347	Emil Toun, Peshtigo	40.00	1 12½	45 00
19	348	F. Armstrong, Peshtigo	40.00	1 00	40 00
19	349	Christopher Wonderlink, Peshtigo	80.00	1 80	144 00
20	350	N. C. Gilkey, Oconto	80.00	43	35 00
20	351	Jacob W. Couillard, Oconto	40.00	1 87	75 00
20	352	Joseph DeKaizer, Brussell	40.00	1 12½	45 00
20	353	Martin Olson, Ellison Bay	40.00	1 12½	45 00
23	354	S. D. D. Newton, Peshtigo	80.00	1 25	100 00
23	355	Levi B. Stewart, Oconto	40.00	2 70	108 00
24	356	Joseph Lamere, Egg Harbor	40.00	2 70	108 00
26	357	N. C. Gilkey, Oconto	120.00	1 08	130 00
Apr. 1	358	G. T. Porter, Oconto	1,128.05	1 32	1,480 00
2	359	Philbrook & Miller, Peshtigo	80.00	45	36 00
2	360	Falk & Anderson, Jacksonport	40.00	1 80	72 00

*Forfeited.

Abstract of land sales made by the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company—Continued.

Date of contract.	No. of contract.	Sold to—	Number of acres.	Price paid per acre.	Amount.
1880.					
Apr. 6	361	John Anderson, sr., Peshtigo	120.00	$1 54	$185 00
6	362	Agnes Hauscomb, Oconto	40.00	1 80	72 00
7	363	F. Armstrong, Peshtigo	120.00	1 25	150 00
8	364	George T. Porter, Oconto	201.38	1 73	350 00
12	365	John Simon, Sevastopol	40.00	1 80	72 00
14	366	G. T. Porter, Oconto	200.00	2 67	535 00
16	367	E. E. Bolles, DePere	2,980.86	1 68	5,152 00
17	368	T. B. McAlpine and M. Engler, Peshtigo	137.00	1 71	235 00
19	369	F. J. Bartels, Peshtigo	40.00	2 50	100 00
19	370	S. A. Coleman, Oconto	40.00	2 37	95 00
20	371	Henry Miller, Schleswig	80.00	1 12½	90 00
27	372	Michiel Cardeur, Little Suamico	40.00	2 25	90 00
May 1	373	A. Cole, E. Scofield, and E. W. Flanders, Oconto	320.00	1 35	435 00
1	374	John Anderson, sr., Peshtigo	640.00	38	247 00
1	375	Eli White, Oconto	80.00	1 50	120 00
3	376	Christian P. Ellis, Peshtigo	80.00	1 75	140 00
3	377	J. T. Engbug, Oconto	40.00	45	18 00
5	378	J. T. Bagnall, Jacksonport	40.00	1 80	72 00
8	379	J. J. McGilliss, Marinette	80.00	1 25	100 00
11	380	William Otto, Pensaukee	40.00	2 70	108 00
12	381	W. A. Ellis and F. Armstrong, Peshtigo	312.57	1 60	508 00
15	382	J. T. Engbug, Oconto	40.00	45	18 00
15	383	John Kelley, Oconto	40.00	2 70	108 00
22	384	John Welsh, Oconto	160.00	1 31	210 00
22	385	The Oconto Company, Oconto	44.82	4 46	200 00
25	386	J. C. Carrigan and T. H. Malone, Milwaukee	227.94	3 07	700 00
28	387	Moses and F. Armstrong, Peshtigo	217.78	1 81	395 00
June 1	388	E. C. Daniels, Sturgeon Bay	40.00	1 80	72 00
1	389	Charles Sievert, Peshtigo	80.00	1 12½	90 00
7	390	Charles Bagley, Jacksonport	40.00	45	18 00
8	391	James Bradley, Oconto	40.00	1 80	72 00
11	392	G. T. Porter, Oconto	157.66	1 15	180 00
12	393	James McGregor, Peshtigo	527.93	1 28	676 00
12	394	Mathias Senn, Oconto	40.00	1 80	72 00
23	395	August Zerot, Oconto	40.00	1 80	72 00
28	396	Angeline Lawrie, Oconto	40.00	2 70	108 00
30	397	John Lesperrence, Peshtigo	40.00	1 12½	90 00
July 2	398	Charles Lentz, Oconto	40.00	1 80	72 00
6	399	P. G. Winters, Peshtigo	40.00	1 12½	45 00
16	400	J. Spies and E. Scofield, Oconto	240.00	4 43	1,075 00
17	401	Niliare Roy, Oconto	40.00	2 25	90 00
26	402	John G. Junke, Peshtigo	40.00	2 50	100 00
27	403	Ernst Labine, Oconto	40.00	2 25	90 00
27	404	Excide Racheleaux, Peshtigo	40.00	2 25	90 00
27	405	T. D. Cook and E. Hyde, Milwaukee	116.35	2 04	237 70
30	406	Wolfgang Stauber, Sturgeon Bay	40.00	3 63	145 00
Aug. 3	407	David G. Powers, Milwaukee	92.28	21	20 00
3	408	Richard G. Volk, Oconto	39.92	1 13	45 00
10	409	Uelide Lesperrence, Peshtigo	80.00	1 66	135 00
10	410	John Bolengea, Oconto	40.00	2 50	100 00
13	411	J. C. Corrigan and T. H. Malone, Milwaukee	760.00	1 97	1,500 00
19	412	John Anderson, sr., Peshtigo	40.00	25	10 00
23	413	James McGregor and M. Engler, Peshtigo	360.00	1 96	705 00
24	414	James McGregor and D. McGregor, Peshtigo	200.00	4 20	840 00
25	415	James McGregor and M. Engler, Peshtigo	440.85	2 45	1,080 00
26	416	James McGregor, Peshtigo	40.00	1 80	72 00
27	417	James McGregor and M. Engler, Peshtigo	80.00	4 68	375 00
30	418	Christain Fanndrie	40.00	2 25	90 00
Sept 4	419	N. C. Gilkey, Oconto	80.00	2 15	170 00
10	420	J. C. Corrigan and T. H. Malone, Milwaukee	160.00	1 50	240 00
13	421	S. A. Coleman, Oconto	360.00	2 26	815 00
14	422	Marie L. Grosse, Little Suamico	40.00	1 12½	45 00
14	423	Henry Brooks, Gillett Centre	40.00	3 00	120 00
17	424	Frank Pelke, Oconto	40.00	1 10	44 00
28	425	George Page, Sevastopol	40.00	2 00	80 00
29	426	Peter Hartman, Sturgeon Bay	42.85	1 39	60 00
29	427	Samuel S. Rice, Oconto	40.00	50	20 00
Oct. 29	428	George Ahlswede, Sturgeon Bay	40.00	2 25	90 00
31	429	William F. Whitney, Oconto	40.00	3 00	120 00
Nov. 23	430	Andrew Moodne, Oconto	40.00	65	26 00
23	431	F. J. Bartels, Peshtigo	416.89	2 23	930 00
23	432	J. Spies, Oconto	164.39	1 12	195 00
23	433	A. J. Smith, Marinette	40.00	78	31 00
23	434	J. A. Hanson, Oconto	40.00	75	29 00
23	435	J. P. Door, Oconto	160.00	1 69	270 00
23	436	F. Armstrong, Peshtigo	160.00	1 58	254 00
23	437	Thomas Murphey, Peshtigo	40.00	1 62	65 00

Abstract of land sales made by the Stuageon Bay and Lake Michigan Skip-Canal and Harbor Company—Continued.

Date of contract.	No. of contract.	Sold to—	Number of acres.	Price paid per acre.	Amount.
1877.					
23	438	A. B. Phillips, Peshtigo	120.59	$2 52	$307 00
23	439	G. T. Porter, Oconto	871.55	1 45	1,286 00
23	440	E. E. Bolles, DePere	1,749.82	1 05	1,845 00
23	441	Holt & Balcomb, Chicago	160.00	1 22	195 00
23	442	Frederick Carney, Marinette	200.00	1 92	385 00
26	443	Niels R. Peterson, Ellison Bay	80.00	3 00	240 00
29	444	John Portenfield	80.00	2 00	160 00
29	445	John Strutz, Little Suamico	120.00	1 25	150 00
30	446	George W. De Lane, Brookside	80.00	25	20 00
Dec. 2	447	H. Sellem, Oconto	40.00	1 50	60 00
2	448	James K. Volt, Oconto	40.00	25	10 00
6	449	William Morrison Lena	40.00	2 00	80 00
8	450	George Porter, West Pensaukee	40.00	1 25	50 00
8	451	Magloire Brien Derochers, Peshtigo	40.00	1 25	50 00
9	452	Leon Cota, Menominee	40.00	50	20 00
9	453	F. Armstrong, Peshtigo	92.05	2 17	200 00
10	454	Sarah J. Baker, Marinette	120.00	66	80 00
14	455	Charles Bagley, Jacksonport	80.00	50	40 00
16	456	Herman Steffka, Peshtigo	80.00	2 50	100 00
16	457	Enoch Hayes, Oconto	40.00	5 00	200 00
20	458	Benjamin Ackrill, Marinette	40.00	50	20 00
21	459	John J. Bovell and E. C. Tuttle, Pensaukee	40.00	25	10 00
22	460	Hans Johnson, Rowley's Bay	40,00	2 50	100 00
22	461	S. Martineau, Kelley's Brook	40.00	1 25	50 00
23	462	Christian Johnson, Maple Valley	360.00	1 44	510 00
29	463	Adam Kadlick, Oconto	40 00	1 25	50 00
30	464	James Smiley, Oconto	80.00	50	40 00
Jan. 3	465	David Pecor, Oconto	40.00	4 00	160 00
3	466	George Baldwin, Chilton	200.00	3 00	600 00
10	467	Thomas L. Raun, Marinette	40.00	1 00	40 00
10	468	Jacob Raun, Marinette	80.00	1 00	80 00
7	469	Nehemil Dodge, Wauwatosa	120.00	1 25	150 00
12	470	Angus McAlister, Oconto	40.00	25	10 00
13	471	Thomas Rymer, Oconto	40.00	5 00	200 00
17	472	F. J. Bartels, Peshtigo	41.98	3 00	126 00
18	473	W. A. Rickaby Manitowoc	40.00	1 25	50 00
20	474	Joseph Prochaska, Oconto	80.00	3 00	240 00
25	475	S. A. Coleman, Oconto	80.00	2 25	180 60
29	476	Louis Bassim, Oconto	40.00	1 25	50 00
Feb. 3	477	Camil Racheleau, Peshtigo	40.00	2 50	100 00
5	478	B. Ramsey and C. H. Jones, Appleton	40.00	2 00	80 00
9	479	Daniel Wells, jr., Milwaukee	40.00	1 00	40 00
14	480	William McFarland, Oconto	40.00	2 50	100 00
14	480	F. Armstrong, Peshtigo	40.00	1 50	60 00
14	481	Samuel Modzen, Minekaunee	40.00	3 00	120 00
22	483	Herman Manske, Marinette	40.00	50	20 00
23	484	Moses Armstrong, Peshtigo	120.00	2 33	280 00
28	485	George G. Greene, Green Bay	160.00	2 75	440 00
Mar. 7	486	C. R. Johnson, Marinette	80.00	50	40 00
8	487	H. W. Gilkey and A. McAlister, Oconto	80.00	25	20 00
9	488	Adolph Schutte, Marinette	40.00	50	20 00
9	489	Ferdinand Rettko, Marinette	40.00	50	20 00
14	490	Archibald McAlister, Marinette	40.00	1 25	50 00
15	491	Frederick Lange, Peshtigo	40 00	1 00	40 00
18	492	George Baldwin, Chilton, Wis	480.00	25	120 00
18	493	....do	40.00	4 00	160 00
18	494	....do	40.00	5 00	200 00
18	495	....do	40.00	5 00	200 00
18	496	....do	40.00	5 00	200 00
18	497	....do	40.00	5 00	200 00
18	498	....do	40.00	5 00	200 00
18	499	....do	40.00	5 00	200 00
18	500	....do	40.00	5 00	200 00
18	501	....do	40.00	4 00	160 00
18	502	....do	40.00	4 00	160 00
18	503	....do	40.00	2 50	100 00
18	504	....do	40.00	2 50	100 00
18	505	....do	40.00	2 50	100 00
18	506	....do	40.23	2 50	100 00
18	507	....do	40.35	2 50	100 00
18	508	....do	40.00	2 50	100 00
18	509	....do	40.00	2 50	100 00
18	510	....do	40.00	2 50	100 00
18	511	....do	40.00	1 00	40 00
18	512	....do	40.00	3 00	120 00
18	513	....do	40.68	1 50	60 00
18	514	....do	40.60	1 50	60 00

Abstract of land sales made by the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company—Continued.

Date of contract	No. of contract.	Sold to—	Number of acres.	Price paid per acre.	Amount.
1877.					
Mar. 18	515	George Baldwin, Chilton, Wis	40.00	$1 50	$60 00
18	516	------do	40.00	1 50	60 00
18	517	------do	40.83	1 50	60 00
18	518	------do	40.75	1 50	60 00
18	519	------do	40.00	1 50	60 00
18	520	------do	40.00	1 50	60 00
18	521	------do	40.00	1 50	60 00
18	522	------do	40.00	1 50	60 00
18	523	------do	40.00	1 50	60 00
18	524	------do	39.00	1 00	40 00
18	525	------do	39.08	1 00	40 00
18	526	------do	320.00	1 87	600 00
19	527	George G. Green, Green Bay	80.00	1 25	100 00
24	528	William Squires, Peshtigo	40.00	2 50	100 00
24	529	Klaus Johnson, Brown County	41.50	50	20 00
28	530	S. A. Coleman, Oconto	80.00	1 00	80 00
29	531	Tofile La Chapells, Peshtigo	40.00	1 25	50 00
31	532	S. A. Coleman, Oconto	40.00	25	10 00
Apr. 7	533	Peter Schellenberg, Oconto	40.00	2 50	100 00
May 9	534	James H. McBrede, Wawautosa	430.00	50	215 00
10	535	Nehemiah Dodge, Wawautosa	80.00	2 00	160 00
10	536	Thomas Brazeau, Oconto	40.00	1 50	60 00
14	537	Frederick Hanson, Oconto	66.41	1 30	85 00
17	538	Wilhelm Roehl, Peshtigo	80.00	1 25	100 00
17	539	Annie Scheelke, Peshtigo	40.00	3 00	120 00
18	540	Jacob Spies, Oconto	40.00	2 00	80 00
23	541	William Morrison, Lena post-office	40.00	2 00	80 00
June 23	542	Chris. Daniels, Sturgeon Bay	80.00	50	40 00
23	543	E. C. Daniels & Co., Leonhardt, Sturgeon Bay	242.75	1 13	275 00
23	545	Lawrence Feifarek, Oconto	40.00	50	20 00
23	544	Archibald Campbell, Oconto Falls	39.10	1 25	50 00
23	546	William J. Carroll, Oconto	40.00	75	30 00
23	547	Jacob Hottenberger, Peshtigo	40.00	2 00	80 00
23	548	Holt & Balcom, Chicago	600.00	68	411 00
23	549	John V. Herriman, Oconto	40.00	1 00	40 00
23	550	Stanislaus Martineau, Oconto	280.00	65	180 00
23	551	J. A. Hanson, Oconto	40.00	2 50	100 00
23	552	------do	67.41	1 33	90 00
23	553	Joseph Acteson, Oconto	40.00	2 50	100 00
23	554	Rasmus Peterson, Oconto	80.00	68	55 00
23	555	John I & E. C. Bovee, Pensaukee	120.00	50	60 00
23	556	A. W. Nelson & M. H. Engler, Peshtigo	600.00	1 04	625 00
23	557	David R. Davis, Green Bay	115.24	1 21	140 00
23	558	Engler McAlpine, Peshtigo	199.86	70	140 00
23	559	W. & J. A. King, Oconto	120.00	50	60 00
23	560	F. J. Bartels, Peshtigo	2,168.83	74	1,605 00
23	561	F. Armstrong, Peshtigo	680.61	5.90	4,015 00
23	562	G. T. Porter, Oconto	1,279.42	1 13	1,455 00
23	563	James McGregor & P. Noll, Peshtigo	832.94	3 24	2,705 00
23	564	H. W. Gilkey, Oconto	518.35	1 19	615 00
23	565	McDonald & Billings L. Co., Oconto	1,793.03	1 09	1,960 00
23	566	S. A. Coleman, Oconto	640.00	75	480 00
23	567	W. Morrison, Lena	80.00	50	40 00
23	568	Katie M. Wedger, Oconto	40.00	50	20 00
23	569	Oconto Company, Oconto	2,786.46	3 04	8,450 00
23	570	J. T. Rice, Oconto	80.00	50	40 00
23	571	Rebecca J. Anderson, Oconto	80.00	87	70 00
53	572	John Bradley, Oconto	40.00	3 00	120 00
23	573	James Belengea, Oconto	80.00	1 25	100 00
July 5	574	Tanis Prudhomme, Peshtigo	40.00	2 50	100 00
6	575	John Wesvwsky, Peshtigo	40.00	1 25	50 00
6	576	Brazeau Brothers, Oconto	40.00	2 00	80 00
6	577	Stanislaus Martineau, Oconto	40.00	50	20 00
8	578	Herman Peth, Marinette	40.00	50	20 00
11	579	Louis Bonrque, jr., Oconto	80.00	1 50	120 00
14	580	Adolph Nequette, Oconto	120.00	1 00	120 00
19	581	James H. McBreed, Wauwatosa	80.00	50	40 00
26	582	G. H. Anderson, Peshtigo	43.80	22	10 00
29	583	Menomonee River Manufactnring Co., Marinette	23.33	43	10 00
29	584	John Stephenson, Little Sturgeon	40.00	2 00	80 00
Aug. 3	585	James and Thomas Morgan, Milwaukee	722.68	1 43	1,040 00
4	586	Charles Lehman, Marinette	40.00	50	20 00
4	587	J. H. Lehman, Marinette	40.00	50	20 00
6	588	J. C. Corrigan and T. H. Malone, Milwaukee	40.00	1 50	60 00
17	589	M. Farrell, Oconto	80.00	2 00	160 00
21	590	M. Y. Cramer, Peshtigo	40.00	4 00	160 00
23	591	John Suchan, Oconto	40.00	2 00	80 00

Abstract of land sales made by the Sturgeon Bay and Lake Michigan Ship-Canal and Harbor Company—Continued.

Date of contract.	No. of contract.	Sold to—	Number of acres.	Price paid per acre.	Amount.
1877.					
Aug. 25	592	Henry Bradley, Lena	40.00	$2 00	$80 00
25	593	Joseph Gilland, Oconto	40.00	2 00	80 00
25	594	Charles D. Post, Maple Valley	80.00	1 75	140 00
29	595	Martin Walescka, Oconto	80.00	2 00	160 00
31	596	Joseph Gilland, Maple Valley	40.00	3 00	120 00
31	596½	Gustave Yance, Oconto	40.00	3 00	120 00
31	597	Charles D. Post, Maple Valley	40.00	1 50	60 00
Sept. 2	598	Archie Mott, Oconto	240.00	43	105 00
3	599	David R. Davis, Green Bay	80.00	1 12	90 00
5	600	Henry Shiner, Peshtigo	40.00	4 00	160 00
7	601	Hamilton & Noll, Peshtigo	40.00	1 87	75 00
13	602	M. P. Smith, Marinette	41.33	50	20 00
13	603	Christian Hempel, Egg Harbor	40.00	2 50	100 00
23	604	George Beyer, Oconto	85.27	41	35 00
Oct. 4	605	Henry Uhl, Peshtigo	40.00	1 00	40 00
6	606	Christian Peterson, Lena	40.00	4 50	180 00
7	607	Hamilton & Noll, Peshtigo	440.00	35	157 00
10	608	George L. Hart, Oconto	40.00	50	20 00
13	609	Margaret Kelley, Kelley's Brook	80.00	1 12	90 00
18	610	Orville F. Cole, Oconto	40.00	3 00	120 00
18	611	....do	40.00	3 00	120 00
21	612	Cales Tisdale, Kelley's Brook	40.00	4 00	160 00
21	613	Isaac Dupind, Kelley's Brook	40.00	1 25	50 00
24	614	H. W. Gilkey, Oconto	80.00	4 50	360 00
26	615	Robert Campbell, Peshtigo	40.00	1 25	50 00
Dec. 13	616	Guido Pfister and E. Mariner, Milwaukee, trustees.	3,345.60	43	1,445 00
13	617		84,492.14	43	36,555 00
		Total	194,788.12	.....	309,277 79

LAND DEPARTMENT,
STURGEON BAY AND LAKE MICHIGAN
SHIP-CANAL AND HARBOR COMPANY,
Milwaukee, Wis., August 24, 1882.

I certify that the foregoing is a true statement of land sales of the 200,000-acre grant made by act of Congress approved April 10, 1866, and conferred upon this company by the State of Wisconsin for the purposes specified in said act, as appears by the records in this office.

D. W. MAXON,
Land Commissioner.

We hereby certify that the foregoing statement is correct to the best of our knowledge and belief.

JESSE SPALDING,
President.
WM. E. STRONG,
Treasurer and Assistant Secretary.

EXHIBIT M.—LETTER OF LIEUTENANT-COLONEL CRAIGHILL TO THE CHIEF OF ENGINEERS, REFERRING TO THE FILING OF CERTAIN MAPS IN THE WAR AND INTERIOR DEPARTMENTS BY THE GOVERNOR OF WISCONSIN.

UNITED STATES ENGINEERS OFFICE,
BALTIMORE, MD., *September* 22, 1886.

GENERAL: Referring to the act of Congress approved April 10, 1866, making to the State of Wisconsin a donation of public lands to aid in constructing a canal and harbor of refuge, I have the honor, in behalf of the Board of Engineers appointed under act of August 5, 1886, to request information on the following points, to be obtained in the proper official quarters through the proper channels:

1st. As to section 3. Was a plot of the canal, &c., filed in the War Department and in the office of the Commissioner of General Land Office? If so, a copy is requested.

2d. As to section 5. Has a statement of sales, &c., of land and of expenditures and earnings been annually returned to the Secretary of the Interior?

3d. As to section 1. Was the setting apart of the donated lands *in due form* and with "the approval of the Secretary of the Interior"?

Was the appraisement of the lands previous to sale made by an authorized agent of the Land Office? If so, a copy of the official action is requested. It is understood

that while the lands were appraised at more than $500,000, the sales, it is stated, did not produce more than about $350,000.

No sufficient explanation of the discrepancy has been as yet had by the Board. If there be any official information on this subject at the Land Office, notice of it is desired in justice to all concerned.

Very respectfully, your obedient servant,

WM. P. CRAIGHILL,
Lieut. Col. of Engineers.

The CHIEF OF ENGINEERS, U. S. A.

EXHIBIT N.—REPLY OF THE COMMISSIONER OF THE GENERAL LAND OFFICE ENUMERATING THE MAPS FILED.

DEPARTMENT OF THE INTERIOR, GENERAL LAND OFFICE,
Washington, D. C., October 21, 1886.

SIR: I am in receipt, through reference by the Department on the 30th ultimo, for report, of a letter dated the 29th ultimo, from the Acting Secretary of War, inclosing one from Lieut. Col. William P. Craighill, Corps of Engineers, asking:

1st. Whether a plat of the Sturgeon Bay and Lake Michigan Ship-Canal, in aid of the construction of which 200,000 acres of the public lands were granted to the State of Wisconsin by act of Congress approved April 10, 1866, was ever filed in this office; and, if so, to be furnished with a copy of the same.

2d. Whether a statement of sales of lands and of expenditures and earnings has been annually returned to the Secretary of the Interor.

3d. Whether the setting apart of the granted lands was in due form, and with "the approval of the Secretary of the Interior."

4th. Whether the appraisement of the lands previous to sale was made by an authorized agent of this office. If so, a copy of the official action is requested.

In reply, I have the honor to report as follows, answering the several inquiries in the order in which they are given above:

1st. A map showing the route of said canal and the plan of the breakwater and harbor was filed in this office May 2, 1867, with letter from the Governor of Wisconsin, dated April 29, 1867. It was stated in the Governor's letter that a similar map had been mailed to the Secretary of War. (Copy of said map is inclosed, marked A.)

On March 10, 1873, Hon. Philetus Sawyer, House of Representatives, filed in this office a second map, showing the plan of the piers for the harbor and the route of the canal, the same being filed in lieu of the map approved and filed in 1867. It is stated in Mr. Sawyer's letter that the filing of said "map of the new route of said canal is made necessary, as Congress in 1871 ordered a new survey of the canal to be made." A careful examination, however, fails to show any Congressional legislation ordering or authorizing a relocation of the route of the canal. (Copy of map of 1873 herewith, marked B.)

2d. So far as shown by the records of this office no statement of the sales of lands and of expenditures and earnings has been returned to the Department.

3d. The lands granted were selected by the duly-appointed agent of the State, and the selections were approved by the Secretary of the Interior.

4th. The lands were not appraised by an agent of this office, such action not being required by the granting act.

The letters of the Secretary of War and Lieutenant-Colonel Craighill are herewith returned.

I am, sir, very respectfully, your obedient servant,

WM. A. J. SPARKS,
Commissioner.

Hon. L. Q. C. LAMAR,
Secretary of the Interior.

EXHIBIT O.—REPLY OF THE CHIEF OF ENGINEERS, ENUMERATING THE MAPS FILED IN THE WAR DEPARTMENT AND IN THE OFFICE OF THE CHIEF OF ENGINEERS.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., November 29, 1886.

SIR: Your letter of the 26th instant, requesting, in behalf of the Board of Engineers appointed under the act of August 5, 1886, to be informed whether the plat of the Sturgeon Bay and Lake Michigan Canal, &c., was filed in the War Department, as required by the third section of the act of April 10, 1866, has been received.

In reply you are informed that there is on file in this Office a map of the "Lake Michigan and Sturgeon Bay Canal," showing plan of breakwater and harbor and the route of said canal, approved and accepted by the governor on the part of the State of Wisconsin, bearing the seal of the State, dated at Madison, April 29, 1867, and also

a "map of a part of Sturgeon Bay and Lake Michigan, showing proposed route for a ship-canal, surveyed in July and August, 1871, by W. T. Casgrain, civil engineer," to which is attached the certificate of the Governor that the map "showing plan of piers for harbor and the route of said canal is approved and accepted by me (him) on the part of the State of Wisconsin, the same being in lieu of a map heretofore accepted and approved and filed, as required by the law of Congress in relation thereto." This certificate bears date February 3, A. D. 1873, and has the seal of the State attached thereto.

By command of Brigadier-General Duane.

Very respectfully, your obedient servant,

JOHN G. PARKE,
Colonel of Engineers,
Bvt. Maj. Gen., U. S. A.

Lieut. Col. WILLIAM P. CRAIGHILL,
Corps of Engineers.

EXHIBIT P.—STATE INSPECTOR'S REPORT TO THE GOVERNOR OF WISCONSIN, DECEMBER 30, 1878.

MADISON, WIS., *December* 30, 1878.

SIR: I have the honor to inform you that I have, in accordance with your instructions of November 15, 1878, made an examination and survey of the work of the Sturgeon Bay and Lake Michigan Ship-Canal, and would respectfully submit the following statements and report:

On account of the advanced stage of the work and its general condition I deemed it advisable, and it was also the desire of the chief engineer of the canal company, to make a very complete survey, to enable accurate computations at present and be valuable for reference in the future.

The survey was conducted in the following manner:

A line of stakes, 50 feet apart, set by the engineer at 100 feet northeast from the center line of the canal, and extending from the head of Sturgeon Bay to Lake Michigan, was carefully remeasured and adjusted; these stakes are numbered from 0 at the head of Sturgeon Bay to 7,300 feet at Lake Michigan.

The 0 is established on the southwest line of the canal at its intersection with the cut of the old line surveyed in 1867, and also with a back range cut through the tibet to the southwest, and is thereby permanently fixed.

A measuring chain of 200 feet length, with tags at each 10 feet, was attached by one end of the aforesaid stakes, and drawn across the cut of the canal at right angles with the axis of the same; along this soundings were taken at the center and at each 10 feet; the distance of the water line and banks from the center was also noted. Soundings were taken in this manner for two days from a boat, but afterwards with more certainty from the ice.

The center line of the canal, bearing N. 46° 15′ W., was produced into Sturgeon Bay, a distance of 4,000 feet, by carefully measuring and marking each 50 feet, the 200-foot chain was then placed at right angles to and its center on the line, holes were made with ice-chisels, and soundings were taken at every 10 feet in each section for 100 feet each side from the center line.

From the point 4,000 feet the line was changed to give a fair range down the bay, on a line bearing N. 57° 45′ W. On this line the sections on the hundreds feet distances were 400 feet long and the fifties 200 feet, and soundings every 10 feet. These were continued to a distance of 3,000 feet from the bend or 7,000 feet from 0. Sections were also taken at stations 48, 50, and 51½; these are shown on accompanying drawing.

During the time the soundings were being taken, careful observations of the stage of water were made at short intervals and a gauge was transferred along as the work progressed; the 0 of the gauge was fixed at the level of the lowest water of the navigable season of 1847, which is the lowest water on record.

It might be proper for me to state here that the Government Engineer, Maj. H. M. Robert, in charge of the breakwater, has reported on the same and made some observations on the canal work; part of his report has become public, in which he appears to say that the company have referred their work to a datum 2 feet above the low water of 1847. Major Robert informed me that this expression did not convey his meaning; that he tried to correct it, but that the report was already in print. What he meant to convey was that the work might be referred to a plane of reference 2 feet above the lowest water of 1847, and be called a 13-foot canal, when in the real sense it would be only 11 feet. I can say from my own personal knowledge that from the first inception to the present day, both by the United States and the canal company, all surveys, plans, estimates, and operations have been made with reference to the low water of 1847.

The general condition of the work is not quite what it should be, and evidently an immoderate haste to accomplish a large amount of excavation without stopping to finish up or make permanent.

The specifications under which the present work is being done provide for the forming of the banks so that the rainfall may drain to the rear and not into the canal; the spoil-banks also encroach on the slope-stakes, when they should not approach within 20 feet of the same; portions of the berms on each side, which were partly natural surface, and partly excavated and paid for, have been filled up from 2 to 4 feet, and in some places even more, to facilitate the work of the derricks in disposing of the material over the already excessive spoil-banks. Now, although these are matters that can be remedied, still it is work that must be done over again, and I deem it just is important to take the same into consideration in preparing my estimates as the actual survey and measurements.

Heretofore the company was a little crowded for room, their right of way being only 400 feet, including the canal, but this season it was relieved. Section 2 of chapter 251 of the laws of 1877, approved March 8, 1877, gives the company authority to take land necessary for the construction of its work, not to exceed 800 feet wide, along the line of the canal, subject to compensation; when such compensation shall have been paid or tendered the title of such lands shall vest in the company in fee-simple. This required tender was made, I believe, in July of the present year, and since then there was ample time to do some work towards arranging the banks.

In the progress of dredging, the contractor has had recourse to deep digging to allow the slopes to break off and to form themselves, and he has met with the usual results.

In this case the surface soil is of loose clean sand, the stratum below the water is a mixture of sand and marl. Now, when the lateral resistance is removed to a considerable depth, the material yields by compression and thereby the repose of large masses is disturbed, and the result is what might be termed land-slides; in some places, where I have reason to believe that the excavation was 16 feet, there is now but 8 or 9 feet of water.

The part of the canal at the head of Sturgeon Bay is bordered by frail banks of muck, which are constantly giving way and widening and shoaling the cut. The plans filed in the office of the secretary of state on August 7, 1872, pursuant to chapter 105 of the laws of 1868, provide for a fascine and riprap protection to this part, and from present appearances the same will be required to make the canal permanent at this point. At the lake end will be required pile piers and revetment into the lake and back in the canal to prevent the banks from washing; it will in fact be impossible to keep open the canal, nor should there be an attempt made to open it until this protection is built. No further protection of the banks may be required for some years after the slopes have permanently formed. The waves in the canal will be but small, and will form a berm with a slope of perhaps $\frac{1}{6}$ to a depth of 2 or $2\frac{1}{2}$ feet, beyond which the slopes will wear very little; a floating boom, supported at intervals by piles, may be sufficient to break the force of the waves entirely, while the piles will serve as fenders to keep vessels from grounding.

In taking out the quantities for the following estimate the soundings were all reduced to the low water of 1847, *i. e.*, the gauge-reading at the time of sounding, which represented the stage of water above the low water of 1847, was subtracted from the measured depth; the contents were computed by prismoidal formula.

The following is the quantity of work yet undone:

	Cubic yards.
Excavation in canal from 0 to 7,300 feet	103,673.30
Excavation for booms and side drains	29,652.11
Excavation 6,750 feet in Sturgeon Bay	65,708.49
Excavation in mouth of canal, Lake Michigan	12,000.00
Excavation for piers at mouth Lake Michigan	15,000.00
Excavation for incomplete work	30,000.00
Total undone	256,033.90

This being more than one-fourth of the whole work in quantity, omitting even the facine and riprap revetment near the head of Sturgeon Bay, without which the canal may be available for some time, it follows that three-fourths of the entire work in quantity is not quite completed.

The progress of the work, with regard to the amount done, I consider very good, and before the end of next season the canal should be in active use, even if not entirely completed.

The piers of the breakwater under construction by the United States are progressing slowly. During the past season only four 50-foot cribs were placed at the end of the northerly pier. The shore end of the piers are constructed of pile-work, and not being closely filled, as they should have been, the sand is washed through during storms in great quantities, and forms an accumulation in the bay between the piers. A large quantity of sand is also brought around the end of the piers, and assists in filling up the harbor. The water-line has advanced 40 feet since 1872 in front of the canal.

The bottom of Sturgeon Bay is very soft material, and there may be some difficulty in maintaining a 13-foot channel unless the slopes are very flat. There are indications of shoaling, owing probably to the disturbance caused by the tugs moving the dump-scows into shallow water. This may, however, cease to be the case when the work is done, as the vessels will travel in mid-channel without causing much disturbance at the bottom. The company may find it to their advantage to enlarge the lower end of the channel when the canal is completed and in operation.

The following are the mean and greatest depths of water in each 500 feet on the center line of canal and on lines 20 feet each side of center from 0 at Sturgeon Bay to Lake Michigan:

Distance on base line.	Twenty feet northeast of center.		Center line.		Twenty feet southwest of center.	
	Mean.	Greatest.	Mean.	Greatest.	Mean.	Greatest.
0 to 500 feet	11.0	14.2	12.2	14.5	11.7	12.8
500 to 1,000 feet	12.0	12.3	11.6	15.6	11.9	12.7
1,000 to 1,500 feet	11.8	12.5	10.9	11.7	12.2	13.7
1,500 to 2,000 feet	12.5	14.0	10.3	11.3	11.5	12.6
2,000 to 2,500 feet	11.4	13.0	9.9	12.0	10.4	12.1
2,500 to 3,000 feet	13.7	13.8	12.0	13.3	11.9	12.4
3,000 to 3,500 feet	11.4	14.0	12.7	13.5	10.7	12.2
3,500 to 4,000 feet	9.9	12.0	11.7	12.2	10.7	13.0
4,000 to 4,500 feet	8.2	9.9	10.0	10.9	10.4	11.8
4,500 to 5,000 feet	7.0	8.7	9.9	11.5	9 6	12.3
5,000 to 5,500 feet	6.2	10.0	8.8	13.0	11.1	13.0
5,500 to 6,000 feet	10.3	10.9	9.0	11.7	6.4	13.2
6,000 to 6,500 feet	10.3	11.4	9 0	10.8	4.9	8.9
6,500 to 6,950 feet	10.5	13.8	8.0	10.2	5.3	6.1
6,950 to 7,300 feet	from 1 to 3 feet above datum.					

The above are reduced to the level of the lowest water of 1847.

The following are the mean depths of water for each 500 feet in Sturgeon Bay on the center line and lines 20 feet each side from 0 at the head of Sturgeon Bay to a point 7,000 feet northwest in the bay:

Distances.	Twenty feet southwest of center.		Center of line.		Twenty feet northeast of center.	
	Mean.	Greatest.	Mean.	Greatest.	Mean.	Greatest.
0 to 500 feet	10.9	12.1	10.7	11.4	10.7	12.6
500 to 1,000 feet	12.0	14.0	10.6	13.0	10.6	14.0
1,000 to 1,500 feet	12.0	13.2	10.2	12.0	9.2	10.5
1,500 to 2,000 feet	12.0	13.2	12.0	12.8	11.3	12.7
2,000 to 2,500 feet	10.1	12.7	10.5	12.0	10.3	13.1
2,500 to 3,000 feet	10.2	12.2	9.1	9.8	9.1	9.6
3,000 to 3,500 feet	9.1	9.7	9.3	9.7	9.0	9.6
Bend 3,500 to 4,000 feet	9.5	9.7	9.5	9.7	9.2	9.3
4,000 to 4,500 feet	9.6	9.9	9.7	10.0	9.6	10.0
4,500 to 5,000 feet	9.5	9.7	9.6	10.0	9.7	10.0
5,000 to 5,500 feet	9.5	9.9	9.7	10.1	9.9	10.1
5,500 to 6,000 feet	10.0	10.8	10.2	10.9	10.2	10.9
6,000 to 6,500 feet	11.5	12.6	11.6	12.0	11.6	12.5
6,500 to 7,000 feet	13.2	13.8	13.1	14.0	13.1	14.0

The above are reduced to the low water of 1847.

From this point of the bay the channel deepens and widens rapidly.

I submit herewith drawings:

A, general map of Sturgeon Bay and Canal, showing general progress and comparative soundings of 1877 and 1878.

B, plat of soundings taken December, 1878, also particular cross-sections of canal and spoil banks.

Acknowledgment is due to the chief engineer, Capt. William T. Casgrain and Mr. G. H. Sagar, superintendent for the contractor, for assistance and facilities rendered in the examination and survey.

I am, most respectfully, your obedient servant,

JOHN NADER,
Civil Engineer, Inspector.

To his Excellency WILLIAM E. SMITH,
Govetnor of Wisconsin.

UNITED STATES OF AMERICA,
State of Wisconsin, Department of State, ss:

To all to whom these presents shall come:

I, Ernst G. Timme, secretary of state of the State of Wisconsin, do hereby certify that the foregoing copy of the report of John Nader, inspector of the Sturgeon Bay and Lake Michigan Ship-Canal, has been compared by me with the original report on file in this department, and that the same is a true copy thereof, and of the whole of such original.

In testimony whereof, I have hereunto set my hand and affixed my official seal at the capitol, in the city of Madison, this 12th day of October, A. D. 1886.

ERNST G. TIMME,
Secretary of State.

EXHIBIT Q.—ESTIMATES FOR CANAL EXCAVATION, 1886.

UNITED STATES ENGINEER OFFICE,
Milwaukee, Wis., September 30, 1886.

SIR: I inclose herewith the estimate of cost of constructing the Sturgeon Bay Canal, which you directed me to prepare during the recent session of the Board in this city.

In the revetted portion of the canal, or from stations 72 to 41, the mean of both sections, 500 feet apart, was taken; in the unrevetted portions the mean of sections closer together was taken, as set forth in the column of "remarks."

It will be seen that the figures vary considerably from that given in statement "D" appended to the report of the Board of December 19, 1882, but this variation was to be expected as the data on which the computation is based are incomplete.

Mr. Wisner has completed his field work and has returned to Detroit.

Very respectfully, your obedient servant.

CHAS. E. L. B. DAVIS,
Captain of Engineers.

Col. WM. P. CRAIGHILL,
Corps of Engineers, U. S. A.

Sturgeon Bay and Lake Michigan Ship-Canal.—Estimate of the number of cubic yards of material excavated, as indicated by survey made under the direction of Lieut. Col. Henry M. Robert, in October, 1882.

No. of station.	Length of section.	Remarks.	Cubic yards.
72 to 74	.....	Above datum and in harbor estimated	9,852
72 to 74	200	Below datum, mean of 72 and 74	9,852
70 to 72	200	Means of depth and elevations of stations 70 and 72	33,423
65 to 70	500	Means of depth and elevations of stations 65 and 70	73,263
60 to 65	500	Means of depth and elevations of stations 60 and 65	54,796
55 to 60	500	Means of depth and elevations of stations 55 and 60	53,628
50 to 55	500	Means of depth and elevations of stations 50 and 55	67,329
45 to 50	500	Means of depth and elevations of stations 45 and 50	100,106
41 to 45	400	Means of depth and elevations of stations 41 and 45	87,890
35 to 41	600	Mean depth of 35, 38, and 41; mean elevation of each 100 feet...	93,903
30 to 35	500	Mean depth of 30 and 35; mean elevation and width of each 100 feet	61,823
25 to 30	500	Mean depth of 25 and 30; mean elevation and width of each 100 feet	60,634
20 to 25	500	Mean depth of 20, 22, and 25; mean elevation and width of each 100 feet	53,486
15 to 20	500	Mean depth of 15, 18, and 20; mean elevation and width of each 100 feet.....	48,870
10 to 15	500	Mean depth of 10, 12, and 15; mean elevation and width of each 100 feet.....	37,205
5 to 10	500	Mean depth of 6, 8, and 10; mean width of 7, 8, 9, and 10	30,808
0 to 5	500	Mean depth of 0 to 5; mean width of 0 to 5	28,166
0 to 6	2,400	Side slopes of.....	97,777
6 to 12	4,000	.....do.....	61,630
Total ..	13,800	Total	1,064,441

1,064,441 cubic yards, at 20 cents per cubic yard $212,888 20

Estimate of materials used and cost of same in place for the construction of 7,304 linear feet of sheet-pile revetment to Sturgeon Bay Canal and Harbor front.

Quantities.	Price.	Amount.
1,935 piles, 25 feet long, 48,375 linear feet	$0 16	*$7,740 00
12-inch by 12-inch pine timber, 14,608 linear feet	22½	*3,286 80
Round timber (mudsill), 7,304 linear feet	5	†365 20
Pine timber, 2-inch by 12-inch, 4-inch by 12-inch, 4-inch by 12-inch, 7,304 linear feet of each, 73,040 feet, B. M. ..... per M..	15 00	†1,095 60
4-inch by 12-inch by 18 feet, and 2-inch by 12 by 16 feet pine sht. pile plank, 759,616 feet, B. M. ..... per M..	30 00	†22,788 48
1,219 iron tie-rods 1½-inch by 16⅔ feet, 105 inches each, 127,995 pounds	6	*7,679 80
1,219 iron drift-bolts, 1-inch square by 24 inches long, 8,119 pounds; 2,438 iron drift-bolts, ½-inch round by 15 inches long, 1,992 pounds; total, 10,111 pounds	5¼	*530 83
29,216 8-inch by ⅜ wrought spikes, 9,115 pounds	6	*546 90
Total		44,033 61

About $6.03 per linear foot.
* Contract price for materials in place at Sturgeon Bay Harbor in 1880.
† Estimated prices for materials in place in 1880 and 1881.

Estimate of materials used and cost of same in place for 1,680 linear feet of brush revetment to banks of Sturgeon Bay Canal.

Description.	Amount.	Remarks.
71 piles, 25 feet long, 1,775 linear feet, at 16 cents.	$284	Contract price of material in place at Sturgeon Bay Harbor in 1880.
560 cords brush, at $2.50	1,400	Estimated price of materials in place in 1881.
Total	1,684	

EXHIBIT R.—ESTIMATE FOR DEEPENING CANAL AND STURGEON BAY TO 18 FEET.

311 WOODWARD AVENUE, DETROIT, MICH., *October* 20.

SIR: I herewith submit estimate for pile revetment and excavation needed to deepen channel through Sturgeon Bay and Sturgeon Bay and Lake Michigan Ship-Canal to 18 feet below canal datum.

Not knowing width the Board may recommend for channel, I have given the amount of excavation necessary for a channel 100 feet wide and also for 160 feet wide for that portion of canal at present not revetted.

For channel across bay I have assumed a uniform width of 200 feet.

The cost per cubic yard I have left blank, not knowing the current rates for doing that character of dredging.

In case the channel should be deepened to 18 feet below canal datum, I presume that the 3,300 feet of canal at Lake Michigan end will need additional revetment for banks, as it is not probable that the sheet-piling already there is driven to sufficient depth to be safe after such excavation was made.

Information as to the depth sheet-piling was driven can probably be had from the office of chief engineer of canal.

Very respectfully submitted.

GEORGE Y. WISNER.

Capt. CHAS. E. L. B. DAVIS,
Milwaukee, Wis.

STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL.

Estimate for deepening channel 100 *feet wide to* 18 *feet below canal datum.*

Station 0 to Station 39:
Pile revetment, 7,800 linear feet, at $6.50 per foot $50,700
Excavation:
Mud, 17,600 cubic yards, at —— per yard .....
Sand and gravel, 73,510 cubic yards, at —— per yard .....
Station 39 to Station 72:
Excavation:
Sand and gravel, 59,360 cubic yards, at —— per yard .....
Rock, 417 cubic yards, at —— per yard .....

Estimate for deepening channel to 18 *feet below canal datum, and* 160 *feet wide from Station* 0 *to Station* 39, *and* 100 *feet wide from Station* 39 *to Station* 72.

Station 0 to Station 39:
Pile revetment, 7,800 linear feet, at $6.50 per foot $50,700
Excavation:
Mud, 49,600 cubic yards, at —— per yard .....
Sand and gravel, 168,840 cubic yards, at —— per yard .....
Station 39 to Station 72:
Excavation:
Sand and gravel, 5,936 cubic yards, at —— per yard .....
Rock, 417 cubic yards, at —— per cubic yard .....

Estimate for deepening channel to 18 *feet below canal datum, and* 200 *feet wide from head of Sturgeon Bay to Dunlap Reef.*

From Canal to Angle Light, 3,750 feet:
Excavation, mud, 240,400 cubic yards, at —— per yard .....
Angle Light to 18-foot curve, 9,500 feet:
Excavation, mud, 227,600 cubic yards, at —— per yard .....
Additional for basin for vessels to turn in at head of bay, 500 feet x 400 feet:
Excavation, mud, 60,000 cubic yards, at —— per yard .....

EXHIBIT S.—STATEMENT OF VESSELS PASSING THROUGH AND TAKING REFUGE IN THE CANAL, 1885.

UNITED STATES ENGINEER OFFICE,
Milwaukee, Wis., October 6, 1886.

SIR: As requested in your letter on the 4th instant, I submit herewith, for the information of the Board of Engineers, on Sturgeon Bay and Lake Michigan Ship-Canal, a statement of the number of vessels which passed through and sought refuge at the canal during the year ending December 31, 1885. No record is in this office of the number of vessels seeking refuge in the canal for any year other than 1885. The statistics inclosed were obtained from Mr. E. S. Minor, superintendent of the canal, who would perhaps be able to give the information for other years.

I also inclose tables of commercial statistics for the years 1880, 1881, 1882, 1883, 1884, and 1885 for the following Green Bay ports, viz: Cedar River, Menomonee, Oconto, Pensaukee, and Green Bay.

No record is in this office for Cedar River for the year 1881.

At Pensaukee Harbor it was reported for 1885, by Mr. H. G. Morgan, of Pensaukee, that there were no shipments in or out during the year.

The sources from which the information was obtained are noted in the tables.

Very respectfully, your obedient servant,

CHAS. E. L. B. DAVIS,
Captain of Engineers.

Capt. W. L. MARSHALL,
Corps of Engineers,

Number of vessels, and their tonnage, which passed through and sought refuge at the Sturgeon Bay and Lake Michigan Ship-Canal during the year ending December 31, 1885.

	Number.	Tonnage.
From Lake Michigan to Green Bay	2,515	442,701
From Green Bay to Lake Michigan	1,006	225,810
In canal for refuge	189	25,637
Total	3,710	694,148

EXHIBIT T.—RATES OF TOLL CHARGES BY THE CANAL COMPANY.

RATES OF TOLL CHARGED BY THE STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL AND HARBOR COMPANY.

		Cents.
During months of March and April, 1882	per ton..	5
During month of May, 1882	do...	4
From June 1, 1882, to November 30, 1886	do...	3

During March and April, 1882, a rebate of 1 cent per ton was made to tugs and steamers towing barges.

Between the dates of June 1, 1882, and November 30, 1886, no charge for toll has been made on tugs and steamers towing barges and scows, when using the canal frequently.

The rate in logs on raft has been 5 cents per 1,000 feet.

EXHIBIT U.—RULES AND REGULATIONS OF THE CANAL COMPANY.

RULES AND REGULATIONS OF THE STURGEON BAY AND LAKE MICHIGAN SHIP-CANAL AND HARBOR COMPANY.

Notice is hereby given to all masters, agents, or other persons in charge of any steam, sail, or towing-boat, or any barge, scow, or raft being towed, or otherwise passing through, that the canal is for transit only, and that toll will be collected for all scows, rafts, or craft above mentioned, for each and every time of passing through or into the canal.

Also,

(1) That all steamers, vessels, scows, and rafts are strictly forbidden to anchor or otherwise be secured, so as to injure the banks, dock, or wharves, obstruct or in any manner impede the progress and safety of such as desire to pass through; and in no case will they be allowed to remain in the canal as above mentioned longer than is necessary to secure them from loss or damage.

(2) That all steamers, towing-boats, and other vessels shall keep as near the center of the canal as possible, so as to avoid grounding, and thereby injure the banks by currents from propelling-wheels; and in case of grounding, rapid or strong working of boat's engines is strictly forbidden.

(3) That all boats engaged in towing shall use two tow-lines and shorten them to the greatest extent, so as to have full control of their tows, and thereby avoid accident while meeting or otherwise passing each other. Also that the rules for meeting or passing, as established by the National Board of Supervising Inspectors of Vessels, must be strictly observed.

(4) That the speed of steam vessels must not exceed 2 miles per hour while running light or towing, and masters of vessels are requested to shorten sail when being towed, so as to enable tugs to observe this rule.

(5) That towing more than one craft abreast, or rafts of greater width than 50 feet, is strictly forbidden.

(6) That all vessels sailing through do so at their own risk, as the company will not be responsible for any damage arising therefrom.

(7) That all damages arising from carelessness, non-observance or violation of the foregoing rules will be assessed to the vessel, scow, raft, or craft doing such damage, and they will be held strictly responsible for the same.

(8) That all towing-boats and steam barges carrying freight and towing shall pay toll, unless licensed by the company to do such towing, or connected with some established line of barges or scows and not carrying freight while towing.

(9) That should any vessel, scow, or raft become an obstruction by reason of sinking or other accident, the owners must remove the same as soon as possible, or they will be held responsible for all damages caused by delay in not so doing.

(10) That all tolls are payable on demand to the authorized agents, at the company's office, or good security given for same before passing through.

(11) Under no circumstances will any steam craft, sailing-vessel, tow-barge, or scow be permitted to stop in the canal, either by anchoring or otherwise, so as to bring two abreast. A strict compliance with this rule will be required, and any master, owner, or agent violating it will subject themselves or craft to the heaviest fine that can be by law imposed.

(12) The collector, night watchman, and master of the tug Jesse Spalding are hereby authorized to assist the superintendent in the enforcement of the foregoing rules, and any orders given by them relative to the passage and safety of all steam crafts, steam barges and their tows, sailing vessels and scows, whether passing or secured by lines or anchors, will be as legal and binding as though given by the superintendent.

(13) Particular attention is called to sections 4, 6, 7, 9, 11, and 12 of the foregoing rules.

E. S. MINOR,
Superintendent.
JESSE SPALDING,
President.
WM. E. STRONG,
Asst. Secretary.

EXHIBIT U 2.—FLUCTUATIONS IN PRICES, WITH REMARKS, FOR COMMON BOARDS AND STRIPS, AND JOIST AND SCANTLING, BY CARGO, ON THE CHICAGO MARKET, FOR FOURTEEN YEARS—1871 TO 1884, INCLUSIVE.

Year.	Month.	Boards and strips, 1,000 feet, B. M.	Joist and scantling, 1,000 feet, B. M.
1871	July	$11 50 to $14 50	$10 50
	October	14 00 to 15 50	$13 00 to 14 00
	December	18 00 to 19 00	17 00 to 20 00
1872	May	16 00	13 00
	August	16 00	12 75
	December	17 00	11 75
1873	May	13 00	10 00
	August	13 00	9 50
	December	13 00	9 50
1874	May	10 50	9 25
	August	10 50	8 25
	December	10 00	9 00
1875	May	9 75	8 50
	August	9 50	8 25
	December	11 00	8 50
1876	May	11 00	8 00
	August	10 00	7 50
	December	9 00	7 25
1877	May	9 00	7 00
	August	9 00	7 25
	December	9 50	7 37½
1878	May	10 12½	8 37½
	August	9 25	7 75
	December	9 00	7 00
1879	May	8 50	6 75
	August	8 00	6 37½
	December	11 00	9 00
1880	May	11 00	8 50
	August	12 00	9 00
	December	11 50	8 62
1881	May	11 00	10 25
	August	12 50	11 25
	December	14 00	12 00
1882	April	15 00	13 50
	July	13 00	11 00
	December	14 00	11 00
1883	May	13 00	10 50
	August	12 75	10 25
	December	13 50	10 50
1884	May	13 00	9 75
	August	11 00	8 50
	December	11 50	8 75

It will be seen that prices reached the highest range in 1872, immediately after the great fire in Chicago, and that the lowest was in 1878, the year before the revival of business, which had been depressed since the panic of 1873. Since then the highest point reached was in 1882. From that year to the present prices have tended downward.

In 1871, after the great fire in Chicago, the prices of joist and scantling were higher in proportion than the other lumber on account of the extraordinary demand for that kind, caused by the fire. It is always cut from the coarsest logs, tops of trees, &c., and the prices are therefore the lowest for the lowest grade of logs.

EXHIBIT V.—COMMERCIAL STATISTICS OF GREEN BAY HARBORS, 1872–1886, INCLUSIVE.

Cedar River Harbor, Michigan.

EXPORTS.

Year ending December 31.	Lumber.	Laths.	Shingles.	Posts.	Pickets.	Railroad ties.	Telegraph poles.	Value, total.
	Feet, B. M.	*Number.*	*Number.*	*Number.*	*Number.*	*Number.*	*Number.*	
1880	32,189,000	4,832,000	.....	250,000	964,000	250,000	30,000	$706,000
1882	48,230,000	7,000,000	.....	320,000	1,000,000	280,000	25,000	
1883	20,600,000	3,881,200	7,550,000	104,190	285,800	154,000	11,000	
1884	24,000,000	5,000,000	4,000,000	95,000	.....	65,000	4,500	

IMPORTS.

Year ending December 31.	Beef.	Pork.	Flour.	Grain.	Feed.	Stone.	Machinery, iron, steel, &c.		General merchandise.	Value, total.
	Bbls.	*Bbls.*	*Bbls.*	*Bush.*	*Tons.*	*Cords.*	*Tons.*	*Pounds.*	*Pounds.*	
1880	750	750	600	35,000	100	.....	.....	.....	.....	$117,500
1882	.....	.....	750	42,000	130	500	200	2,000,000	.....	
1883	*55,000	.....	960	29,850	65	230,000	22	560,000	35,000	
1884	*55,000	200	1,100	550	30	.....	12	160,000	85,000	

*Pounds.

Pensaukee Harbor, Wisconsin.

EXPORTS.

Year ending December 31—	Lumber.	Laths.	Shingles.	Posts.	Pickets.	Railroad ties.	Machinery, iron, &c.
	Feet, B. M.	*Number.*	*Number.*	*Number.*	*Number.*	*Number.*	*Pounds.*
1881	10,000,000	.....	8,000,000	125,000	15,000	20,000	.....
1882	*5,000,000 10,000,000	.....	*800,000 14,480,000	*1,000,000 150,000	.....	*25,000	*10,000
1883	*500,000 6,500,000	1,500,000	*1,000,000 4,450,000	*5,000 25,000	.....	.....	.....
1884	*117,000 430,000	.....	*350,000	*120,000	.....	.....	*3,000

Pensaukee Harbor, Wssconsin—Continued.

IMPORTS.

Year ending December 31—	Beef.	Pork.	Flour.	Grain.	Feed.	Machinery, iron, steel, &c.		General merchandise.
						Tons.	Pounds.	
		Barrels.	*Barrels.*	*Bushels.*	*Tons.*			*Pounds.*
1881	†120	200	.....	11,000	.....	.....	.....	.....
1882	‡2,500	300	*800 1,500	.....	*70 275	10	*42,500 32,000	*60,000 115,000
1883	.....	*100	*500 500	.....	*100 100	*5 10	4,000	*60,000 120,000
1884	.....	.....	*5,000	.....	*16,120	.....	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	204,045

* By rail. † Barrels. ‡ Pounds.

Oconto Harbor.

EXPORTS.

Year ending December 31—	Lumber and logs.	Laths.	Shingles.	Posts.	Railroad ties.	Telegraph poles.	Machinery, iron, &c.	Value. Total.
	Feet, B. M.	*Number.*	*Number.*	*Number.*	*Number.*	*Number.*	*Pounds.*	
1882	*32,750,000 32,750,000	*6,650,000 6,650,000	*18,000,000	*2,200,000	*325,000	*9,000	*300,000 440,000	
1883	*40,000,000 35,000,000	*6,000,000 7,000,000	*23,000,000 10,000,000	*25,000,000	.....	*2,000 8,000	*850,000 4,800,000	
1884	*42,000,000 34,000,000	*7,000,000 8,000,000	*24,000,000 8,000,000	*410,000 42,000	*250,000 100,000	*50,000	†240 60,000	
1885	.....	.....	.....	.....	.....	.....	.....	$1,510,200

IMPORTS.

Year ending December 31—	Beef.	Flour.	Feed.	Grain.	Stone.	Machinery, iron, &c.		General merchandise.		Value. Total.
	Pounds.	*Barrels.*	*Tons.*	*Bushels.*	*Cords.*	*Tons.*	*Pounds.*	*Barrels.*	*Pounds.*	
1882	*480,000	*9,800	*1,200	*25,000 69,600	100	*195 65	*2,150,000 1,300,000	*1,200	*7,500,000 2,500,000	
1883	*120,000 70,000	*2,500	*5,000	*24,500 6,000	350	*2,200 800	*6,350,000 2,400,000	.....	*6,000,000 7,000,000	
1884	*300,000 140,000	*3,100	*3,500 2,000	*161,000 13,000	200	*1,000 1,000	*900,000 300,000	.....	*20,000,000 10,000,000	
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	$1,389,600

* By rail. † Tons.

Green Bay Harbor, Wisconsin.

EXPORTS.

Year ending December 31—	Lumber.	Laths.	Shingles.	Posts.	Wheat.	Iron.	Staves.	Value. Total.
	Feet, B. M.	*Number.*	*Number.*	*Number.*	*Bushels.*	*Tons.*	*Number.*	
1875*	31,380	.....	10,228,000	.....	971,877	68,840	10,341,000	.....
1876	15,900	.....	68,454,000	.....	447,410	11,908	5,271,000	.....
1877	70,000,000	.....	15,709,000	.....	1,032,830	9,472	7,969,000	.....
1878	4,200,000	.....	13,401,000	.....	1,942,700	7,522	6,428,000	.....
1880	2,712,375	.....	9,424,000	.....	73,550	10,628	429,000	.....
1881	3,148,300	†29,600	22,482	.....	92,500	7,910	212,050	.....
1882	660,500	171,000	†6,297,000	3,500	101,590 †529,000	40,716	.....	.....
1883‡	.....	.....	.....	.....	208,000	1,570	.....	.....
1885	.....	.....	.....	.....	.....	.....	.....	$1,083,000

IMPORTS.

Year ending Dec. 31—	Provisions.	Coal.	Salt.	General merchandise.		Stone.	Wheat.	Oil.	Iron.	Value. Total.
	Bbls.	*Tons.*	*Bbls.*	*Tons.*	*Pkgs.*	*Cords.*	*Bushels.*	*Bbls.*	*Tons.*	
1875*	831	4,390	18,832	.....	52,832	.....	.....	.....	67,112	.....
1876	1,747	7,710	30,684	.....	69,860	.....	.....	.....	41,979	.....
1877	1,647	5,400	.....	1,720	67,940	§672	.....	.....	19,930	.....
1878	1,172	6,244	4,621	947	68,500	.....	.....	.....	1,100	.....
1880	82	12,683	21,578	4,447	.....	.....	.....	3,876	37,633	.....
1881	1,263	†29,224	24,716	†26,000	.....	.....	†748,900	3,764	460 †46,378	.....
1882	§400	.....	‖3,928,400	†26,000	.....	1,237	.....	.....	60,000	.....
1883‡	.....	60,099	267 15,363	.....	.....	260,000	.....	.....	¶2,139 16,552	.....
1885	.....	.....	.....	.....	.....	.....	.....	.....	.....	$575,498

*For year ending June 30, 1875.
†By rail.
‡Statistics for 1883 are only partial; full quantities of imports and exports could not be obtained.
§Tons.
‖Pounds.
¶Packages.

Menomonee Harbor, Michigan and Wisconsin.

EXPORTS.

Year ending December 31—	Lumber.	Lath.	Shingles.	Posts.	Pickets.
	Feet, B. M.	*Number.*	*Number.*	*Number.*	*Number.*
1872	156,000,000	25,000,000	Tons, 10,000	Tons10,000	.....
1874	120,855,786	26,190,150	22,206,000	200,000	1,095,730
1875	134,000,000	28,500,000	25,000,000	250,000	1,278,500
1876	140,000,000	3,000,000	20,000,000	240,000	1,800,000
1877	150,000,000	3,500,000	35,000,000	450,000	2,000,000
1878	160,000,000	4,250,000	30,000,000	450,000	2,500,000
1879	196,250,000	25,175,000	16,000,000	55,000	1,284,000
1880	200,000,000	21,000,000	20,000,000	2,000,000	2,000,000
1881	200,000,000	10,000,000	10,000,000	100,000	.....
1882	45,000,000	20,000,000	25,000,000	1,000,000	.....
1883	400,000,000	2,000,000	*20,000,000 3,000,000	*1,000,000 1,000,000	....
1884	*20,000,000 400,000,000	4,000,000	*20,000,000 20,000,000	*1,000,000 2,000,000	....

Menomonee Harbor, Michigan and Wisconsin—Continued.

Year ending December 31—	Sundries.	Telegraph poles.	Iron.	Value. Total.
	Tons.	*Number.*	*Tons.*	
1872	20,000			$1,233,267 37
1874	1,157		42	
1875			4,000	
1876	†1,000		2,200	
1877			3,650	
1878			3,450	
1879			3,280	
1880		10,000	‡250 100,000	
1881			250	
1882		25,000	2,000	
1883		*1,000,000 500,000	*103,000	
1884		1,000,000 *500,000	12,000	
1885				70,000,000

IMPORTS.

Year ending December 31—	Beef.*	Pork.	Stone.	Grain.	General merchandise.	Sundries.	Machinery; iron, and steel, &c.	Groceries.	Bricks.	Value Total.
		Barrels.	*Cords.*	*Bush'ls.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Number.*	
1872					20,000					$1,113,940 23
1874				120,000		§2,000				
1875		2,500		200,000	2,000					
1876	‖1,950	1,375	500	135,000	2,800					
1877	‖2,500	4,000	650	125,000	2,800				700,000	
1878	‖3,000	5,000	1,200	150,000	1,500	2,000			900,000	
1879	‖2,986	4,060	720	119,200	2,524				1,540,000	
1880	‖1,000	1,000	1,500	100,000	10,000				1,000,000	
1881	¶300	2,000	700				100,130		4,000,000	
1882	‡40,000	5,000	500		200			125	250,000	
1883	‡75,000 ‡*25,000	5,000 *1,000	1,500		200 *100		*200 270	125	*10,000 2,000,000	
1884	‡80,000 ‡*40,000	4,000 *1,500	1,400		150 *80		*250 150	150	*20,000 2,500,000	
1885										55,000,000

* By rail.
† Ice.
‡ Pounds.
§ Hay.
‖ Barrels.
¶ Tons.

Menomonee Harbor, Michigan and Wisconsin.

ARRIVALS.

	Steamers.			Sailing vessels.			Total vessels.	Total tonnage.
	No.	Tonnage.	Crews.	No.	Tonnage.	Crews.		
Year ending June 30—								
1872							983	358,863
1874	210			468			678	
Year ending December 31—								
1874				499	152,793	3,491	499	152,793
1875	170	128,185	2,150	520	156,240	4,050	690	284,425
1876	108	43,200	1,728	504	130,500	2,736	612	173,700
1877	130	45,100	1,789	521	141,500	2,850	651	186,600
1878	175	61,255	2,625	480	134,000	2,440	655	195,255
1879	402	189,406	6,252	638	178,462	3,902	1,040	367,868
1880	130	520,000	1,900	450	140,000	3,797	580	660,000
1881	98	36,193	1,960	439	129,972	2,634	537	166,165
1882	265	106,577	6,053	523	153,000	3,477	788	259,577
1883	265	85,139	5,020	405	128,560	3,127	670	213,699
1884	194	57,191	3,854	397	125,962	2,630	591	183,153
1885							591	183,153

Menomonee Harbor, Michigan and Wisconsin—Continued.

DEPARTURES.

	Steamers.			Sailing vessels.			Total vessels.	Total tonnage.
	No.	Tonnage.	Crew.	No.	Tonnage.	Crew.		
Year ending June 30—								
1872	.....	.....	.....	.....	.....	.....	1,027	378,435
1874	209	.....	.....	468	.....	.....	677	.....
Year ending December 31—								
1874	.....	.....	.....	499	152,793	3,491	499	152,793
1875	169	127,876	2,134	515	154,740	4,010	684	282,616
1876	107	42,791	1,712	498	128,193	2,693	605	170,984
1877	129	44,600	1,776	520	141,250	2,841	649	185,850
1878	171	59,855	2,565	470	131,250	2,820	641	191,105
1879	396	190,056	6,332	638	178,540	4,080	1,034	368,596
1880	127	519,000	1,881	450	140,000	3,797	577	659,000
1881	102	36,734	2,040	440	129,921	2,640	542	166,555
1882	266	106,988	6,082	524	153,899	3,691	790	260,887
1883	267	84,726	5,082	411	131,572	3,162	678	216,298
1884	200	56,981	3,901	398	126,381	2,625	598	183,362
1885	.....	.....	.....	.....	.....	.....	598	183,362

Green Bay Harbor, Wisconsin.

ARRIVALS.

	Steamers.			Sailing vessels.			Total vessels.	Total tonnage.
	No.	Tonnage.	Crews.	No.	Tonnage.	Crews.		
Year ending June 30—								
1872	.....	.....	.....	.....	.....	.....	629	146,230
1874	244	.....	.....	154	.....	.....	398	128,503
1875	209	77,200	2,778	113	20,638	674	322	97,838
Year ending December 31—								
1876	202	98,648	3,295	120	27,940	841	322	126,588
1877	145	67,735	2,371	110	27,762	753	255	95,497
1878	183	84,601	2,711	117	27,940	802	300	112,541
1880	270	81,048	4,369	97	18,888	545	367	99,936
1881	270	71,621	3,696	188	29,348	974	458	100,969
1882	399	87,319	.....	257	38,915	.....	656	126,234
1883	247	48,090	3,414	255	51,804	1,489	502	99,894
1884	193	29,801	.....	162	19,291	.....	355	49,092
1885	334	77,374	.....	172	29,657	.....	506	107,031

DEPARTURES.

	Steamers.			Sailing vessels.			Total vessels.	Total tonnage.
	No.	Tonnage.	Crew.	No.	Tonnage.	Crew.		
Year ending June 30—								
1872	.....	.....	.....	.....	.....	.....	632	146,600
1874	259	.....	.....	156	.....	.....	415	127,472
1875	200	77,200	2,778	113	20,638	674	322	97,838
Years ending December 31—								
1876	200	98,180	3,276	118	27,530	825	318	125,710
1877	151	68,526	2,405	108	27,573	735	259	96,099
1878	180	84,519	2,674	111	26,972	764	291	111,491
1880	285	82,560	4,491	105	19,349	570	390	101,909
1881	283	72,553	3,771	193	29,534	1,002	476	102,087
1882	406	90,015	.....	267	38,304	.....	673	128,319
1883	253	48,685	3,434	246	50,821	1,220	499	99,506
1884	208	31,166	.....	173	20,114	.....	381	51,180
1885	345	77,069	.....	183	29,477	.....	528	106,546

Pensaukee Harbor, Wisconsin.

ARRIVALS.

Year ending December 31.	Steamers.			Sailing vessels.			Total vessels.	Total tonnage.
	No.	Tonnage.	Crews.	No.	Tonnage.	Crews.		
1881	30	3,420	210	40	15,680	320	70	19,100
1882	228	10,500	.....	75	18,000	.....	303	28,500
1883	322	10,000	1,932	40	12,500	300	362	22,500
1884	41	7,255	41	.....	.....	.....	41	7,255
1885	.....	.....	.....	.....	.....	.....	.....	.....

DEPARTURES.

1881	30	3,420	210	40	15,680	320	70	19,100
1882	228	10,500	.....	75	18,000	.....	303	28,500
1883	322	10,000	1,932	40	12,500	300	362	22,500
1884	41	7,255	.....	.....	.....	.....	41	7,255
1885	.....	.....	.....	.....	.....	.....	.....	.....

Cedar River Harbor, Michigan.

ARRIVALS.

Year ending December 31—	Steamers.			Sailing vessels.			Total vessels.	Total tonnage.
	No.	Tonnage.	Crews.	No.	Tonnage.	Crews.		
1880	380	38,000	2,880	185	50,875	1,295	565	88,875
1882	490	57,000	3,470	220	74,600	1,520	710	131,600
1883	166	9,798	994	105	39,900	840	271	49,698
1884	137	10,180	1,088	121	35,856	897	258	46,036

DEPARTURES.

1880	380	38,000	2,880	185	50,875	1,295	565	88,875
1882	490	57,000	3,470	220	74,600	1,520	710	131,600
1883	166	9,798	994	105	39,900	840	271	49,698
1884	137	10,180	1,088	121	35,856	897	258	46,036

Oconto Harbor, Wisconsin.

ARRIVALS.

Year ending December 31—	Steamers.			Sailing vessels.			Total vessels.	Total tonnage.
	No.	Tonnage.	Crews.	No.	Tonnage.	Crews.		
1882	260	3,600	175	113	9,300	248	373	12,900
1883	241	.....	.....	160	.....	.....	401	.....
1884	63	3,150	315	130	26,000	920	193	29,150
1885	.....	.....	.....	.....	.....	.....	254	172,460

DEPARTURES.

1882	260	3,600	175	113	9,300	248	373	12,900
1883	240	.....	.....	161	.....	.....	401	.....
1884	68	3,400	340	139	27,800	973	207	31,200
1885	.....	.....	.....	.....	.....	.....	261	173,840

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 107.

"THE DALLES," COLUMBIA RIVER.

LETTER

FROM THE

ACTING SECRETARY OF WAR,

TRANSMITTING

A letter from the Chief of Engineers relative to the proposed survey of "The Dalles," Columbia River.

JANUARY 25, 1887.—Referred to the Committee on Rivers and Harbors and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 24, 1887.

The Acting Secretary of War has the honor to transmit to the House of Representatives, for the information of the Committee on Commerce, a copy of a letter from the Chief of Engineers of the 14th instant, wherein he suggests an amendment to the following resolution submitted in the Senate on the 9th ultimo, so as to provide for not less than $15,000 for the execution of the survey mentioned therein:

Resolved, That the Secretary of War be, and is hereby, directed to examine and report as to the necessity for the improvement of that portion of the Columbia River known as "The Dalles," by the removal of obstructions so as to permit the free navigation thereof, and as to the practicability and probable cost of overcoming such obstructions to navigation by the construction of a steamboat railway around The Dalles and Celilo Rapids and removing obstructions at Three-Mile and Ten-Mile Rapids.

S. V. BENÉT,
Brigadier-General, Chief of Ordnance, and Acting Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., January 14, 1887.

SIR: I have the honor to invite attention to the following resolution submitted in the Senate of the United States by the Hon. Mr. Dolph, of Oregon, December 9, 1886, and printed in the Congressional Record of January 12, 1887, viz:

Resolved, That the Secretary of War be, and is hereby, directed to examine and report as to the necessity for the improvement of that portion of the Columbia River

known as "The Dalles," by the removal of obstructions so as to permit the free navigation thereof, and as to the practicability and probable cost of overcoming such obstructions to navigation by the construction of a steamboat railway around The Dalles and Celilo Rapids and removing obstructions at Three-Mile and Ten-Mile Rapids,

and to suggest the propriety of an amendment to the resolution before its passage, providing a sufficient sum for the execution of the survey, which, in the judgment of this office, should not be less than $15,000.

The examinations and surveys required for the preparation of plans and estimates for works of so great importance must of necessity be in great detail and involve investigations of an unusual character, requiring much study and exactness, and it is believed could not properly be executed for a less sum than that named.

In this connection it may be stated that the river and harbor bill now under consideration by the House of Representatives provides, among others, for examination and survey of "Upper Columbia River, Oregon and Washington Territory, between The Dalles City and Celilo, with a view to improving the navigation in connection with a boat railway," and contains an appropriation of $75,000 "for examinations, surveys, and contingencies, and for incidental repairs for which there is no special appropriation for rivers and harbors," a sum totally inadequate for the purpose designed when the other surveys and examinations called for and the contingencies which are to be paid from it are considered.

The matter is deemed of sufficient importance to be presented to Congress, and it is recommended accordingly that it be brought to the attention of the Committee on Commerce of the United States Senate and the Committee on Rivers and Harbors of the House of Representatives.

Very respectfully, your obedient servant,

J. C. DUANE,
Brigadier-General, Chief of Engineers.

Hon. WM. C. ENDICOTT,
Secretary of War.

C

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 108.

COURT OF CLAIMS PRINTING.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

A letter from the Chief Justice of the Court of Claims in relation to a deficiency appropriation for printing for that court for the current fiscal year.

JANUARY 26, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 25, 1887.

SIR: I have the honor to transmit herewith, for the consideration of Congress, copy of letter from the Chief Justice of the Court of Claims of the 21st instant, in relation to the urgent necessity of a deficiency appropriation of $4,000 for printing for the Court of Claims for the current fiscal year.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

CHAMBERS OF THE COURT OF CLAIMS,
Washington, D. C., January 21, 1887.

DEAR SIR: I am directed by my associate judges to ask for a deficiency appropriation for printing for the Court of Claims as a matter of urgent necessity. We shall need for the present year, in addition to what has heretofore been appropriated, at least $5,000. This is made necessary by the great number of French spoliation claims, amounting to 5,500, of which all but about 1,000 have been brought during the past year, and to a large increase of the business of the court under other acts of Congress, particularly the "Act to afford assistance and relief to Congress and the Executive Departments in the investigation of claims and demands against the Government." It is expected that

next year the amount provided in the regular bill will be sufficient. This request is made in accordance with the provisions of the act of July 7, 1884 (23 Stat. L, ch. 334, p. 254), with the view that the Secretary will lay the estimate before Congress in season for its consideration in connection with the deficiency bill now pending.

I am, very respectfully, yours, &c.,

WILLIAM A. RICHARDSON,
Chief Justice.

Hon. DANIEL MANNING.
Secretary of the Treasury.

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49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. Doc. No. 109.

MEXICAN PENSION ESTIMATES.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

SUBMITTING

An estimate from the Secretary of the Interior of an appropriation to meet expenditures under the Mexican pension bill.

JANUARY 26, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 25, 1887.

SIR: I have the honor to transmit herewith, for the consideration of Congress, copy of letter of the 24th instant, from the Secretary of the Interior, submitting estimates of appropriations by the Commissioner of Pensions to meet expenditures under the Mexican pension bill, in the event of its approval, as follows:

First yearly payment of pensions, $4,663,104.

Increase in the clerical force of the Pension Office, aggregating $257,000.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

DEPARTMENT OF THE INTERIOR,
Washington, January 24, 1887.

SIR: I have the honor to transmit, herewith, a copy of a letter of the Commissioner of Pensions, dated the 22d instant, stating that in case of the approval of the Mexican bill granting pensions to the survivors and widows of that war, an additional appropriation of $4,663,104 will be required for making the first yearly payment, and an increase of 221 in the clerical force, aggregating an annual addition to the pay-roll of his Bureau of $257,000, and I beg leave to recommend that the same be forwarded to Congress for its favorable consideration.

Very respectfully,

L. Q. C. LAMAR,
Secretary.

The SECRETARY OF THE TREASURY.

DEPARTMENT OF THE INTERIOR,
PENSION OFFICE,
Washington, January 22, 1887.

SIR: I have the honor to state that in case of the approval of the Mexican bill granting pensions to the survivors and widows of that war, an additional appropriation for pensions will be required for the year; and also an additional clerical force, to enable me promptly to dispose of the new and extraordinary business thus presented to the Bureau.

I have caused careful estimates to be made by experienced men in this Bureau, and upon their reports to me I state as follows:

(1) The amount which will be required for making the first yearly payment will be $4,663,104, which said sum I have the honor to request shall be made immediately available for the purpose of payments under said act.

(2) As is well known to you, the entire force of this Bureau is at present engaged in the most active manner in disposing of the present and current business of the Bureau. The provisions of the Mexican bill are such that I have hoped I should be able to make very expeditious disposition of the work which it will necessitate, and which will be presented to this Bureau under said act. To do this, however, will involve one of two things—either to withdraw a large force of clerks now at work upon the current business, which will cause a retardation of that business, or in the employment of a new and additional force.

To dispose of the work in question, created by said Mexican bill, by the 30th of June, will require an additional clerical force of 1 assistant chief of division, at a salary of $1,800; 15 section chiefs to be clerks of class 2, at a salary of $1,400; 150 clerks of class 1, at a salary of $1,200; 15 record clerks of the $1,000 class; 35 clerks of the $1,000 class; and five messengers; making an aggregate increase in the force of 221 employés, and an aggregate annual addition to the pay-roll of this Bureau of $257,000.

If this fund and this force are placed at my disposal I believe I shall be able to substantially close the general work under the bill by the 30th of June, proximo, provided said force is made immediately available.

I add hereto a memorandum showing the basis upon which the above requisitions are made.

MEMORANDUM.

The probable number of surviving enlisted men of the various classes described in said Mexican bill is 34,748. The probable number of widows, &c., is 13,826.

I have the honor to be, very respectfully,

JOHN C. BLACK,
Commissioner.

Hon. L. Q. C. LAMAR,
Secretary of the Interior.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. DOC. No. 110.

AN ACCOUNT

OF THE

RECEIPTS AND EXPENDITURES

OF

THE UNITED STATES

FOR

THE FISCAL YEAR ENDING JUNE 30, 1884.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1887.

H. Ex. 23——34

TREASURY DEPARTMENT,
Document No. 985.
Register.

LETTER FROM THE SECRETARY OF THE TREASURY TRANSMITTING A DETAILED STATEMENT OF THE EXPENDITURES OF THE UNITED STATES FOR THE FISCAL YEAR ENDING JUNE 30, 1884.

JANUARY 27, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 25, 1887.

SIR: In pursuance of the standing order of the Honse of Representatives of December 30, 1791, and section 237 of the Revised Statutes, to define and establish the fiscal year of the Treasury of the United States, I have the honor to transmit herewith a detailed account of the receipts and expenditures of the United States for the fiscal year ended June 30, 1884, prepared in the office of the Register of the Treasury.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

General account of the receipts and expenditures of the United States for the fiscal year ending June 30, 1884.

TO RECEIPTS.

From customs.

J. W. Wakefield, collector, Bath, Me	$77,434 88
A. A. Burleigh, collector, Aroostook, Me	18,216 85
B. F. Davis, collector, Bangor, Me	49,453 60
J. D. Hopkins, collector, Frenchman's Bay, Me	271 61
W. C. Marshall, late collector, Belfast, Me	1,169 00
I. M. Boardman, collector, Belfast, Me	324 23
W. M. Haycock, late collector, Passamaquoddy, Me	8,046 73
N. B. Nutt, collector, Passamaquoddy, Me	40,594 85
F. N. Dow, collector, Portland, Me	638,176 82
W. H. Sargent, collector, Castine, Me	347 69
H. A. Kennedy, collector, Waldoborough, Me	1,415 38
J. L. Pierce, collector, Machias, Me	1,302 26
A. F. Howard, collector, Portsmouth, N. H	50,762 17
William Wells, collector, Vermont, Vt	732,604 78
J. F. Hanover, collector, Fairfield, Conn	1,495 22
H. N. Trumbull, collector, Stonington, Conn	267 60
A. Putnam, collector, Middletown, Conn	59,447 33
A. J. Beers, collector, New Haven, Conn	244,629 35
J. A. Tibbetts, collector, New London, Conn	16,029 74
R. Worthington, collector, Boston, Mass	21,968,195 45
F. B. Goss, collector, Barnstable, Mass	867 49
J. Brady, jr., collector, Fall River, Mass	9,125 34
F. J. Babson, collector, Gloucester, Mass	3,958 81
S. Dodge, late collector, Marblehead, Mass	1,082 75
F. A. Osgood, collector, Marblehead, Mass	502 05
S. H. Doten, collector, Plymouth, Mass	23,860 68
E. H. Huse, collector, Newburyport, Mass	3,542 34
C. H. Odell, collector, Salem, Mass	16,314 96
J. A. P. Allen, collector, New Bedford, Mass	27,196 67
C. H. Marchant, collector, Edgartown, Mass	573 71
C. Harris, collector, Providence, R. I	196,529 51
J. H. Cozzens, collector, Newport, R. I	1,189 19
W. H. Robertson, collector, New York, N. Y	134,361,872 05
J. A. Luby, collector, Albany, N. Y	91,011 88
C. A. Gould, collector, Buffalo, N. Y	752,943 67
G. W. Warren, collector, Cape Vincent, N. Y	45,683 00
W. T. Simpson, late collector, Genesee, N. Y	20,216 85
C. E. Morris, collector, Genesee, N. Y	227,895 33
P. P. Kidder, collector, Dunkirk, N. Y	83 68
B. Flagler, collector, Niagara, N. Y	260,021 04
J. J. Lamoree, collector, Oswego, N. Y	630,373 58
S. Moffett, collector, Champlain, N. Y	298,938 93
W. H. Daniels, collector, Oswegatchie, N. Y	241,778 73
G. W. Mathis, collector, Little Egg Harbor, N. J	11 49
W. A. Baldwin, collector, Newark, N. J	4,070 55
M. A. Edgar, collector, Perth Amboy, N. J	27,908 48
M. A. Barr, late collector, Erie, Pa	688 64
H. C. Stafford, collector, Erie, Pa	9,817 74
J. F. Hartranft, collector, Philadelphia, Pa	12,900,078 60
J. F. Dravo, collector, Pittsburgh, Pa	488,508 29
L. Thompson, collector, Delaware, Del	27,576 64
E. H. Webster, collector, Baltimore, Md	2,306,287 73
C. S. English, late collector, Georgetown, D. C	1,378 95
J. H. Wilson, collector, Georgetown, D. C	21,231 48
J. H. Gray, collector, Alexandria, Va	939 98
B. C. Cook, collector, Richmond, Va	8,583 69
G. E. Bowden, collector, Norfolk, Va	33,301 35
H. DeB. Clay, collector, Yorktown, Va	18,359 75
T. A. Henry, collector, Pamlico, N. C	1,785 18
A. C. Davis, collector, Beaufort, N. C	19,361 86
E. J. Pennypacker, collector, Wilmington, N. C	46,112 59
W. P. Canaday, late collector, Wilmington, N. C	191 09
C. E. Robinson, collector, Albemarle, N. C	4 60
T. B. Johnston, collector, Charleston, S. C	46,374 21
George Holmes, collector, Beaufort, S. C	10,662 03
H. F. Heriot, collector, Georgetown, S. C	300 26
T. F. Johnson, collector, Savannah, Ga	82,138 13
Carried forward	177,181,471 09

General account of the receipts and expenditures of the United States for the fiscal year ending June 30, 1884.

BY EXPENDITURES.

LEGISLATIVE.

Page.			
	Senate.		
1	Salaries and mileage of Senators	$408,030 56	
1	Salaries of officers and employés	271,492 46	
1	Contingent expenses:		
1	Stationery and newspapers	15,715 10	
1	Horses and wagons	2,733 71	
1	Fuel for heating apparatus	6,982 32	
1	Furniture and repairs	9,863 07	
1	Packing-boxes	670 00	
1	Folding documents	2,500 00	
1	Material for folding	4,500 00	
1	Expenses of special and select committees	50,206,77	
2	Miscellaneous items	9,993 92	
2	Salaries of Capitol police	18,207 80	
2	Capitol police contingent fund	18 00	
2	Reporting proceedings and debates	25,000 00	
2	Postage	300 00	
2	Expenses of preparing and compiling Congressional Directory	1,200 00	
2	Payment to legal representative of Hon. George S. Houston	5,860 60	
2	Payment to Charles L. Jones, messenger	465 65	
11	Descriptive catalogue of Government publications	5,695 89	
	Total expenses United States Senate		$839,435 85
	House of Representatives.		
2	Salaries and mileage of Members and Delegates	1,864,220 19	
2	Salaries of officers and employés	357,359 06	
2	Contingent expenses:		
2	Stationery and newspapers	47,402 89	
2	Furniture and repairs	7,222 32	
2	Fuel for heating apparatus	6,801 47	
2	Material for folding	15,708 67	
3	Miscellaneous items	52,572 45	
3	Packing-boxes	2,987 00	
3	Cartage	600 00	
3	Salaries, Capitol police	18,299 76	
3	Postage	550 00	
3	Digest of contested-election cases	1,000 00	
3	Payment to J. J. McElhone, official reporter	1,000 00	
3	Payment to Frank Galt, assistant journal clerk	492 00	
3	Payment to widow of Hon. E. W. M. Mackey	5,586 67	
3	Payment to widow of Hon. T. H. Herndon	8,875 00	
8	Payment to mother of Hon. W. F. Pool	7,737 66	
3	Payment to Alexander B. Thomas and Wilson Grice	1,080 00	
3	Payment to widow of Hon. D. C. Haskell	6,715 97	
		2,406,211 11	
	Deduct repayments:		
3	Contingent expenses, uniforms for Capitol police	$1 00	
3	Payment to H. H. Smith, journal clerk	500 00	501 00
	Total expenses House of Representatives		2,405,710 11
	Public Printer.		
4	Salaries	15,300 00	
4	Contingent expenses	2,197 95	
4	Repairs Government Printing Office	12,360 17	
4	Publication of Tenth Census Report	295,859 24	
4	Printing annual report (1881) Commissioner of Agriculture	27,685 57	
4	Printing annual report (1883) Commissioner of Agriculture	92,227 15	
4	Publication of information in aid of societies of Red Cross	906 78	
4	Printing and binding third volume Catalogue of Library of Surgeon-General's Office	1,504 85	
4	Removal and storage of certain material, Government Printing Office	2,000 00	
4	Public printing and binding	2,378,977 27	
	Total expenses Public Printer		2,829,018 98
	Carried forward		6,074,164 94

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$177,181,471 09	
H. P. Farrow, collector, Brunswick, Ga	18,870 74	
W. A. Phelps, collector, Atlanta, Ga	127 20	
J. Shephard, collector, Saint Mary's, Ga	158 40	
J. W. Howell, collector, Fernandina, Fla	2,337 12	
F. N. Wicker, collector, Key West, Fla	262,014 16	
R. Alverez, acting collector, Key West, Fla	71,822 64	
S. M. Sawyer, collector, Apalachicola, Fla	6,042 84	
J. M. Tarble, collector, Pensacola, Fla	61,333 79	
E. Higgins, collector, Saint John's, Fla	820 88	
J. Hirst, collector, Saint Mark's, Fla	3,673 77	
J. W. Burke, collector Mobile, Ala	72,760 61	
W. G. Henderson, collector, Pearl River, Miss	15,084 39	
J. R. Jolley, collector, Teché, La	75 65	
A. S. Badger, collector, New Orleans, La	2,077,347 40	
J. L. Haynes, collector, Brazos, Tex	27,335 98	
N. Plato, collector, Corpus Christi, Tex	28,142 16	
A. Tibbetts, collector, Paso del Norte, Tex	56,662 76	
F. A. Vaughan, collector, Saluria, Tex	12,007 91	
A. G. Malloy, collector, Galveston, Tex	173,642 88	
T. T. Cassels, collector, Memphis, Tenn	4,889 54	
D. Kercheval, collector, Nashville, Tenn	2,302 55	
J. K. Faulkner, collector, Louisville, Ky	119,829 42	
J. W. Cobbs, collector, Paducah, Ky	171 50	
A. H. Beach, collector, Wheeling, W. Va	1,344 87	
J. R. Leonard, collector, Indianapolis, Ind	81,271 50	
J. C. Jewell, collector, Evansville, Ind	53,633 45	
C. Rude, collector, Sandusky, Ohio	4,950 76	
J. B. Batelie, collector, Miami, Ohio	23,605 01	
D. W. McClung, collector, Cincinnati, Ohio	815,966 85	
G. W. Howe, collector, Cuyahoga, Ohio	179,562 10	
D. V. Bell, late collector, Detroit, Mich	148,063 44	
W. Livingstone, jr., collector, Detroit, Mich	148,535 31	
C. T. Osburn, collector, Superior, Mich	16,535 76	
J. P. Sanborn, late collector, Huron, Mich	14 89	
W. Hartsuff, collector, Huron, Mich	64,137 75	
D. McLaughlin, collector, Michigan, Mich	2,336 11	
J. Spalding, collector, Chicago, Ill	3,850,343 91	
C. Barner, collector, Galena, Ill	37	
C. M. Whitney, collector, Saint Louis, Mo	1,530,902 52	
James Hunter, collector, Saint Joseph, Mo	11,494 88	
R. C. Crowell, collector, Kansas City, Mo	48,686 12	
V. Smith, collector, Duluth, Minn	1,416 80	
J. Bookwalter, collector, Minnesota, Minn	73,982 43	
A. W. Hall, collector, Milwaukee, Wis	176,330 76	
William B. Finch, collector, La Crosse, Wis	40 70	
J. Campbell, collector, Omaha, Nebr	6,201 82	
George Frazee, collector, Burlington, Iowa	5 80	
R. Armstrong, collector Dubuque, Iowa	1 75	
J. C. Montgomery, collector, Denver, Colo	30,044 11	
W. H. Hunt, jr., collector, Montana and Idaho	315 08	
W. G. Morris collector, Alaska, Alaska	645 40	
F. N. Shurtliff, collector, Willamette, Oreg	388,004 89	
J. D. Merriman, collector, Oregon, Oreg	66,018 78	
C. Van Clive, collector, Yaquina, Oreg	26,354 23	
A. W. Bash, collector, Puget Sound, Wash	55,650 43	
E. L. Sullivan, late collector, San Francisco, Cal	6,063,640 18	
W. H. Sears, collector, San Francisco, Cal	924,428 73	
G. A. Johnson, collector, San Diego, Cal	12,806 18	
J. R. Brierly, collector, Wilmington, Cal	58,410 45	
W. H. Pratt, collector, Humboldt, Cal	2,880 26	
		$195,067,489 76

From sales of public lands.

Commissioner General Land Office	3,083 22	
J. C. Murphy, late receiver of public moneys, Dardanelle, Ill	783 00	
J. M. Wilkinson, receiver of public moneys, Marquette, Mich	244,316 55	
J. M. Farland, late receiver of public moneys, Detroit, Mich	6 00	
L. G. Wilcox, receiver of public moneys, Detroit, Mich	2,109 49	
W. H. C. Mitchell, receiver of public moneys, Reed City, Mich	8,919 55	
G. B. Brooks, receiver of public moneys, East Saginaw, Mich	6,619 78	
J. F. Naison, receiver of public moneys, Falls Saint Croix, Wis	3,934 57	
E. B. Sanders, receiver of public moneys, Wausau, Wis	114,934 39	
W. Callon, late receiver of public moneys, Wausau, Wis	11	
J. H. Wing, late receiver of public moneys, Bayfield, Wis	12,173 14	
C. G. Bell, receiver of public moneys, Bayfield, Wis	8,157 89	
V. W. Bayless, receiver of public moneys, Eau Claire, Wis	35,017 75	
J. Ulrich, receiver of public moneys, La Crosse, Wis	5,447 40	
J. H. Jones, receiver of public moneys, Manasha, Wis	42,780 23	
W. B. Mitchell, receiver of public moneys, Saint Cloud, Minn	684,266 75	
Carried forward	1,172,549 82	195,067,489 76

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.			
	Brought forward		$6,074,164 94
	Library of Congress.		
4	Salaries	$36,640 00	
4	Increase of library	13,000 00	
5	Contingent expenses	1,500 00	
5	Works of art for the Capitol	8,000 00	
5	Publishing historical documents relating to early French discoveries in the Northwest and on the Mississippi River	1,418 00	
5	Purchase of military papers, maps, &c., of Count de Rochambeau	20,000 00	
5	Purchase of Matt H. Carpenter's records and briefs in Supreme Court cases	8,000 00	
	Total expenses Library of Congress		88,558 00
	Botanic Garden.		
5	Salaries	11,700 00	
5	Improving Botanic Garden	10,000 00	
	Total expenses Botanic Garden		21,700 00
	Court of Claims.		
5	Salaries of Judges, &c	29,436 49	
5	Contingent expenses	1,000 00	
5	Reporting decisions, &c	2,919 22	
5	Payment of judgments	33,999 55	
	Total expenses Court of Claims		67,355 26
	EXECUTIVE.		
	Executive Office.		
3	Salary of the President	50,000 00	
3	Salary of the Vice-President	3,991 63	
3	Salaries Executive Office	34,961 04	
3	Contingent expenses, Executive Office	7,995 94	
3	Promoting the efficiency of the civil service	795 30	
3	Preventing the spread of epidemic diseases	54,967 54	
3	Salaries, Civil Service Commission	17,236 40	
3	Traveling expenses, Civil Service Commission	2,974 50	
	Total expenses Executive Office		172,922 35
	State Department.		
29	Salaries	111,352 04	
29	Contingent expenses	4,568 00	
29	Proof-reading	573 63	
29	Lithographing	1,028 36	
29	Books and maps	3,032 18	
29	Stationery, furniture, &c	5,206 58	
29	Postage	3,110 00	
29	Editing, publishing, &c., Revised and Annual Statutes	4,308 77	
29	Observance of centennial anniversary of the surrender of Lord Cornwallis, at Yorktown	328 92	
29	Transmission of certain books, &c., to National Lincoln Monument Association, Springfield, Ill	24 15	
		133,532 63	
	Deduct repayments:		
29	Removal and rearrangement of records	$80 96	
29	Purchase of the Franklin collection of books and papers	86 89	
		167 85	
	Total expenses State Department		133,364 78
	Treasury Department—salaries, &c.		
	Salaries:		
5	Office of Secretary	493,452 06	
5	Office of Supervising Architect	19,383 05	
5	Office of Secret Service Division	12,732 13	
5	Office of Supervising Surgeon-General, Marine Hospital Service	28,840 00	
5	Office of Supervising Inspector-General, Steamboat Inspection Service	10,140 00	
5	Office of First Comptroller	80,996 30	
5	Office of Second Comptroller	107,950 65	
	Carried forward	753,494 19	6,558,065 33

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$1,172,549 82	$195,067,489 76
H. W. Stone, receiver of public moneys, Benson, Minn	10,993 78	
W. W. Spalding, late receiver of public moneys, Duluth, Minn	90,394 55	
E. G. Swanstrom, receiver of public moneys, Duluth, Minn	10,783 30	
J. Lind, receiver of public moneys, Tracy, Minn	6,616 13	
P. C. Sletten, receiver of public moneys, Crookston, Minn	105,788 63	
George B. Folsom, receiver of public moneys, Taylor's Falls, Minn	12,334 87	
W. B. Herriott, receiver of public moneys, Redwood Falls, Minn	2,533 80	
J. H. Allen, receiver of public moneys, Fergus Falls, Minn	27,220 69	
C. H. Smith, receiver of public moneys, Worthington, Minn	4,736 78	
H. H. Griffith, receiver of public moneys, Des Moines, Iowa	2,298 68	
Z. L. Wise, receiver of public moneys, Dardanelle, Ark	8,827 92	
C. E. Kelsey, receiver of public moneys, Little Rock, Ark	16,181 88	
A. C. Phillips, receiver of public moneys, Harrison, Ark	25,912 56	
W. A. Tufts, receiver of public moneys, Camden, Ark	12,928 50	
J. Dumars, receiver of public moneys, Springfield, Mo	35,478 12	
George H. Crumb, receiver of public moneys, Ironton, Mo	65,792 84	
C. H. McNulty, receiver of public moneys, Booneville, Mo	6,274 89	
H. A. Wilson, receiver of public moneys, Montgomery, Ala	142,277 04	
W. H. Tancre, receiver of public moneys, Huntsville, Ala	22,093 81	
J. F. Rollins, receiver of public moneys, Gainesville, Fla	476,629 28	
J. T. Hull, receiver of public moneys, Jackson, Miss	115,411 68	
A. E. Lemee, receiver of public moneys, Natchitoches, La	4,737 36	
M. Marks, receiver of public moneys, New Orleans, La	420,583 48	
W. Burwell, late receiver of public moneys, New Orleans, La	59 35	
J. L. Ray, late receiver of public moneys, Munroe, La	1,862 57	
C. E. Chandler, receiver of public moneys, Oberlin, Kans	21,400 36	
R. P. Hayes, receiver of public moneys, Kirwin, Kans	40,553 73	
E. J. Jackson, late receiver of public moneys, Concordia, Kans	11,182 05	
S. Wrong, receiver of public moneys, Concordia, Kans	6,941 13	
W. H. Pilkinton, receiver of public moneys, Wa Keeney, Kans	7,967 60	
H. Booth, receiver of public moneys, Larnedd, Kans	30,582 11	
L. Hanback, late receiver of public moneys, Salina, Kans	576 66	
H. S. Cunningham, receiver of public moneys, Salina, Kans	16,528 51	
J. L. Dyer, receiver of public moneys, Wichita, Kans	11,568 50	
A. J. Hoisington, receiver of public moneys, Garden City, Kans	14,533 65	
George Merrill, late receiver of public moneys, Topeka, Kans	1,702 91	
J. Q. A. Peyton, receiver of public moneys, Topeka, Kans	2,576 90	
H. M. Waters, receiver of public moneys, Independence, Kans	3,851 39	
J. Stout, late receiver of public moneys, Boisé City, Idaho	1 90	
M. Krebs, receiver of public moneys, Boisé City, Idaho	22,066 94	
R. J. Munroe, late receiver of public moneys, Lewiston, Idaho	32,434 53	
A. J. Shaw, receiver of public moneys, Lewiston, Idaho	14,215 00	
A. W. Eaton, receiver of public moneys, Oxford, Idaho	12,449 71	
J. S. Waters, receiver of public moneys, Harley, Idaho	19,160 42	
S. Parker, receiver of public moneys, Niobrara, Nebr	103,087 60	
H. S. Lovejoy, late receiver of public moneys, Niobrara, Nebr	48 00	
C. N. Baird, late receiver of public moneys, Lincoln, Nebr	102 00	
H. D. Root, receiver of public moneys, Lincoln, Nebr	4,162 37	
A. W. Montgomery, receiver of public moneys, Bloomington, Nebr	72,804 18	
J. W. Tucker, receiver of public moneys, Valentine, Nebr	47,349 92	
W. B. Lambert, receiver of public moneys, Neligh, Nebr	34,227 23	
W. Anyan, receiver of public moneys, Grand Island, Nebr	93,557 97	
C. F. Babcock, receiver of public moneys, McCook, Nebr	72,761 87	
J. Taffee, receiver of public moneys, North Platte, Nebr	13,419 97	
W. H. Somers, receiver of public moneys, Beatrice, Nebr	1,893 26	
E. A. Allen, late receiver public moneys, Omaha, Nebr	5,495 10	
F. Stuart, receiver of public moneys, Nebraska City, Nebr	1,773 77	
A. O. Whipple, receiver of public moneys, Devil's Lake, Dak	66,537 96	
E. P. Champlin, receiver of public moneys, Deadwood, Dak	39,639 72	
J. G. Chandler, receiver of public moneys, Yankton, Dak	169,384 71	
H. Barber, jr., receiver of public moneys, Mitchell, Dak	466,411 16	
R. Lowrey, receiver of public moneys, Huron, Dak	1,095,491 50	
George F. Potter, late receiver of public moneys, Pembina, Dak	8,424 28	
B. E. Hutchinson, receiver of public moneys, Aberdeen, Dak	438,825 96	
W. H. Francis, receiver of public moneys, Bismarck, Dak	68,881 47	
E. M. Brown, late receiver of public moneys, Bismarck, Dak	67 06	
W. J. Anderson, receiver of public moneys, Grand Forks, Dak	444,341 77	
E. C. Gearey, receiver of public moneys, Fargo, Dak	445,800 00	
T. M. Pugh, late receiver of public moneys, Fargo, Dak	12 00	
H. R. Pease, receiver of public moneys, Watertown, Dak	454,569 39	
W. S. Hickox, receiver of public moneys, Durango, Colo	14,421 76	
C. A. Brastow, receiver of public moneys, Del Norte, Colo	8,402 47	
C. B. Hickman, late receiver of public moneys, Lake City, Colo	1,486 20	
C. D. Peck, receiver of public moneys, Lake City, Colo	10,177 56	
F. J. Leonard, receiver of public moneys, Gunnison, Colo	50,652 67	
W. C. Willets, receiver of public moneys, Denver, Colo	96,743 81	
E. W. Henderson, receiver of public moneys, Central City, Colo	18,808 07	
M. H. Fitch, receiver of public moneys, Pueblo, Colo	81,536 08	
W. K. Burchinell, late receiver of public moneys, Leadville, Colo	3,200 00	
E. L. Salisbury, receiver of public moneys, Leadville, Colo	39,417 85	
M. M. Bane, receiver of public moneys, Salt Lake, Utah	29,577 39	
E. Ballou, receiver of public moneys, Helena, Mont	137,950 28	
Carried forward	7,713,040 67	195,067,489 76

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.			
	Brought forward	$753,494 19	$6,558,065 33
	Salaries:		
5	Office of Commissioner of Customs	51,162 05	
5	Office of First Auditor	82,968 56	
5	Office of Second Auditor	239,293 31	
5	Office of Third Auditor	218,441 38	
5	Office of Fourth Auditor	69,178 73	
6	Office of Fifth Auditor	45,013 87	
6	Office of Sixth Auditor	402,010 06	
6	Office of Treasurer of the United States	272,054 04	
6	Office of Treasurer of the United States (national currency reimbursable)	68,700 79	
6	Office of Register	182,074 18	
6	Office of Light-House Board	41,082 15	
6	Office of Commissioner of Internal Revenue	297,426 95	
6	Office of Commissioner of Internal Revenue (reimbursable)	2,364 43	
6	Office of Life-Saving Service	32,876 74	
6	Office of Comptroller of the Currency	102,562 01	
6	Office of Comptroller of the Currency (national currency reimbursable)	16,792 56	
5	Additional clerks adjusting accounts of Soldiers' Home	5,000 00	
6	Bureau of Statistics	50,165 85	
7	Postage	20,279 74	
7	Postage to postal-union countries	500 00	
8	Examination of national banks and bank plates	291 65	
8	Collecting statistics relating to commerce	5,330 72	
	Contingent expenses:		
6	Stationery	30,476 58	
7	File holders and cases	10,500 00	
7	Binding newspapers, &c	1,966 48	
7	Investigation of accounts and traveling expenses	1,500 00	
7	Freights, telegrams, &c	4,000 00	
7	Rent	8,925 00	
7	Horses and wagons	4,806 40	
7	Ice	4,000 00	
7	Fuel, &c	13,970 59	
8	Gas, &c	13,997 48	
8	Carpets and repairs	8,000 00	
8	Furniture, &c	19,610 47	
8	Miscellaneous items	9,966 61	
	Total expenses Treasury, salaries, &c		3,090,783 57
	Treasury Department—Miscellaneous.		
8	Expenses of the national currency	23,617 35	
8	Distinctive paper for United States securities	35,000 00	
8	Redemption of worn and mutilated United States notes	13,551 92	
8	Transportation of silver coin	13,282 53	
16	Storage of silver	84,338 20	
8	Plans for public buildings	1,599 90	
8	Vaults, safes, and locks, for public buildings	75,000 00	
8	Suppressing counterfeiting and other crimes	61,266 50	
9	Lands and other property of the United States	720 00	
9	Propagation of food-fishes	181,477 59	
9	Illustrations for report on food-fishes	1,000 00	
9	Steam vessels, food-fishes	10,000 00	
9	Fish Commission buildings, Wood's Holl, Mass	25,000 00	
9	Expenses of inquiry respecting food-fishes	3,500 00	
9	Salaries and expenses members of National Board of Health	9,155 10	
10	Purchase, &c., Louisville and Portland Canal, Kentucky	24,000 00	
11	Contingent expenses national currency (reimbursable)	78,097 15	
11	Statue of Chief Justice Marshal	15,000 00	
12	Payment of surplus proceeds of lands sold for direct taxes	15,150 50	
12	Books and serials for Government actuary	250 00	
	Smithsonian Institution:		
12	Expenses	42,180 00	
12	North American Ethnology	39,625 00	
12	Reconstructing eastern portion of building	30,000 00	
12	Library, Treasury Department	471 07	
12	Monument to commemorate the battle of Monmouth, N. J	20,000 00	
12	Monument to mark the birthplace of George Washington	2,207 70	
12	Erection of a monumental column at Yorktown, Va	25,000 00	
12	Portrait of the late Benjamin H. Hill	500 00	
12	Portrait of the late William M. Lowe	500 00	
12	Portrait of the late Godlove S. Orth	496 33	
12	Portrait of the late J. T. Updegraff	498 78	
12	Portrait of the late Robert M. A. Hawk	578 20	
12	Portrait of the late John W. Shackelford	554 08	
12	Sinking fund Union Pacific Railroad Company	1,668,925 00	
	Carried forward	2,502,542 90	9,648,848 90

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$7,713,040 67	$195,067,489 76
C. H. Gould, receiver of public moneys, Miles City, Mont	13,505 42	
J. T. Carlin, receiver of public moneys, Bozeman, Mont	43,604 17	
S. W. Sherfey, receiver of public moneys, Las Cruces, N. Mex	32,232 91	
M. H. Bailhache, receiver of public moneys, Santa Fé, N. Mex	28,576 35	
S. C. Wright, receiver of public moneys, Carson City, Nev	2,409 06	
H. Carpenter, receiver of public moneys, Eureka, Nev	2,710 00	
J. Knox, receiver of public moneys, Lake View, Oreg	14,489 32	
G. B. Curry, receiver of public moneys, Le Grande, Oreg	101,699 18	
J. G. Pilsbury, receiver of public moneys, Oregon City, Oreg	36,038 28	
J. C. Fullerton, receiver of public moneys, Roseburg, Oreg	21,936 35	
C. N. Thornbury, receiver of public moneys, The Dalles, Oreg	60,889 13	
R. G. Stuart, receiver of public moneys, Olympia, Wash	429,562 92	
T. K. Kooney, late receiver of public moneys, Walla Walla, Wash	17,119 69	
Jas. Braden, receiver of public moneys, Walla Walla, Wash	87,500 00	
J. L. Wilson, receiver of public moneys, Spokane Falls, Wash	106,508 33	
A. O. Marsh, receiver of public moneys, Vancouver, Wash	47,743 69	
J. M. Adams, receiver of public moneys, Yakema, Wash	12,891 73	
C. E. Darley, receiver of public moneys, Tucson, Ariz	18,843 64	
B. Cameron, receiver of public moneys, Tucson, Ariz	600 00	
A. W. De Long, receiver of public moneys, Prescott, Ariz	3,565 50	
W. M. Garvey, receiver of public moneys, Cheyenne, Wyo	2,794 00	
W. S. Hurlburt, receiver of public moneys, Cheyenne, Wyo	157,011 77	
E. S. Crocker, receiver of public moneys, Evanston, Wyo	7,943 07	
T. Lindsey, receiver of public moneys, Visalia, Cal	30,971 42	
H. Z. Osborne, receiver of public moneys, Bodie, Cal	12,574 32	
J. W. Haverstick, receiver of public moneys, Los Angeles, Cal	34,465 98	
C. H. Chamberlain, receiver of public moneys, San Francisco, Cal	238,303 36	
T. J. Sherwood, receiver of public moneys, Marysville, Cal	74,659 06	
A. Dobrowsky, receiver of public moneys, Shasta, Cal	60,244 62	
G. W. Meylert, late receiver of public moneys, Susanville, Cal	360 47	
F. G. Ward, receiver of public moneys, Susanville, Cal	15,044 20	
O. Perrin, receiver of public moneys, Stockton, Cal	61,234 87	
H. O. Beatty, late receiver of public moneys, Sacramento, Cal	6,260 50	
C. F. Gardner, receiver of public moneys, Sacramento, Cal	54,882 34	
S. Cooper, receiver of public moneys, Humboldt, Cal	258,488 69	
		9,810,705 01
From internal revenue.		
Commissioner of Internal Revenue	163,051 85	
Treasurer of the United States	24 53	
A. L. Morgan, collector 1st district, Alabama	1,739 92	
L. H. Mayer, late collector 1st district, Alabama	75 00	
F. M. Shouse, acting collector 2d district, Alabama	3,462 37	
A. Bingham, collector, Alabama	80,454 26	
H. M. Cooper, collector, Arkansas	90,819 19	
S. W. Fisher, collector, Arizona	3,769 73	
C. Hartson, collector 1st district, California	3,098,098 62	
A. L. Frost, collector 4th district, California	283,233 63	
J. S. Wolfe, collector, Colorado	195,999 50	
J. Selden, collector 1st district, Connecticut	387,856 14	
D. F. Hollister, collector 2d district, Connecticut	40,093 32	
J. McIntyre, collector, Delaware	210,327 24	
J. L. Pennington, collector, Dakota	9,905 32	
D. Eagan, collector, Florida	174,884 17	
W. H. Johnson, collector, Georgia	378,587 40	
L. M. Pleasants, collector 3d district, Georgia	3,745 25	
J. A. Holtzclaw, late collector 4th district, Georgia	135 63	
R. W. Berry, collector, Idaho	5,262 98	
J. D. Harvey, collector 1st district, Illinois	8,446,073 80	
L. B. Crooker, collector 2d district, Illinois	228,121 74	
A. Woodcock, collector 3d district, Illinois	3,457 45	
R. Rowett, collector 4th district, Illinois	432,650 47	
H. Knowles, collector 5th district, Illinois	13,081,543 92	
J. W. Hill, collector 7th district, Illinois	20,260 59	
J. Merriam, late collector 8th district, Illinois	134,132 82	
J. Wheeler, collector 8th district, Illinois	557,692 65	
D. B. House, acting collector 8th district, Illinois	217,965 87	
C. W. Pavey, collector 13th district, Illinois	450,287 20	
J. C. Veatch, collector 1st district, Indiana	15,520 58	
W. Cumback, collector 4th district, Indiana	228,060 58	
H. McKay, collector 6th district, Indiana	3,335,152 30	
W. W. Carter, collector 7th district, Indiana	1,816,257 00	
George Moon, collector 10th district, Indiana	14,021 07	
T. M. Kirkpatrick, collector 11th district, Indiana	212,199 42	
J. W. Green, collector 2d district, Iowa	2,313,586 05	
J. E. Simpson, collector 3d district, Iowa	220,613 05	
J. Connell, late collector 4th district, Iowa	14,568 85	
J. W. Burdette, collector 4th district, Iowa	77,657 90	
L. P. Sherman, collector 5th district, Iowa	129,331 05	
J. C. Carpenter, collector, Kansas	167,555 99	
S. R. Crambaugh, late collector 2d district, Kentucky	866,354 15	
Carried forward	38,114,590 55	204,878,194 77

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.				
	Brought forward		$2,502,542 90	$9,648,848 90
12	Trust-fund interest for support of free schools in South Carolina		1,748 00	
12	Expenses incurred under act relating to Chinese		1,382 80	
12	Canceling and redeeming stamps, office Commissioner Internal Revenue		20,000 00	
12	Mail transportation, Pacific Railroads		915,868 29	
13	Refunding to national banking associations, excess of duty		156 25	
13	Payment of decree in case Spanish ferry-boat Nuestra Señora de Regla		148,203 00	
13	Relief of E. H. George and H. W. Walker		375 00	
			3,590,276 24	
	Deduct excess repayments:			
9	Salaries and expenses National Board of Health	$28,433 91		
11	Outstanding liabilities	2,187 53		
12	Polaris report, Smithsonian Institution	1 22		
12	Monument to Thomas Jefferson at Monticello, Va.	1,647 17		
12	Sinking fund Central Pacific Railroad Company	541,800 00		
16	Storage of silver dollars	172 65		
			574,242 48	
	Total expenses Treasury, miscellaneous			3,016,033 76
	Bureau of Engraving and Printing.			
9	Salaries		24,798 60	
9	Labor and expenses		475,026 57	
	Total expenses Bureau of Engraving and Printing			499,825 17
	Independent Treasury.			
	Salaries office assistant treasurer, at—			
13	Baltimore		21,573 01	
13	Boston		36,060 00	
13	Chicago		21,364 78	
13	Cincinnati		15,960 00	
13	New York		166,270 99	
13	New Orleans		14,090 00	
13	Philadelphia		35,075 27	
13	Saint Louis		16,580 00	
13	San Francisco		28,120 00	
13	Salaries of special agents		1,877 90	
13	Checks and certificates of deposit		5,728 35	
13	Contingent expenses		63,071 33	
			425,771 63	
	Deduct excess repayment:			
14	Constructing vaults, office assistant treasurer, San Francisco	75		
	Total expenses Independent Treasury		425,770 88	
				13,590,478 71
	Mints and assay offices.			
14	Salaries, office Director of the Mint		26,948 47	
14	Contingent expenses, office Director of the Mint		6,896 94	
15	Salaries, mint at Carson, Nev		29,500 00	
15	Wages of workmen, mint at Carson, Nev		53,994 56	
15	Contingent expenses, mint at Carson, Nev		24,124 19	
15	Salaries, mint at Denver, Colo		10,950 00	
15	Wages of workmen, mint at Denver, Colo		12,000 00	
15	Contingent expenses, mint at Denver, Colo		6,401 98	
15	Salaries, mint at New Orleans, La		30,495 06	
15	Wages of workmen, mint at New Orleans, La		73,999 28	
15	Contingent expenses, mint at New Orleans, La		34,933 63	
15	Salaries, mint at Philadelphia		41,473 11	
15	Wages of workmen, mint at Philadelphia		284,937 13	
15	Contingent expenses, mint at Philadelphia		99,925 17	
15	Salaries, mint at San Francisco		43,385 17	
15	Wages of workmen, mint at San Francisco		222,637 34	
15	Contingent expenses, mint at San Francisco		43,423 55	
16	Salaries, assay office, Boisé City, Idaho		3,000 00	
16	Wages and contingent expenses, assay office, Boisé City, Idaho		5,029 29	
16	Salaries, assay office, Charlotte, N. C		2,750 00	
16	Wages and contingent expenses, assay office, Charlotte, N. C		1,450 80	
16	Salaries, assay office, New York		39,101 70	
16	Wages of workmen, assay office, New York		22,702 50	
16	Contingent expenses, assay office, New York		9,292 31	
	Carried forward		1,129,352 18	13,590,478 71

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$38,114,590 55	$204,878,194 77
E. Farley, collector 2d district, Kentucky	1,214,993 99	
L. Buckner, collector 5th district, Kentucky	8,626,352 49	
J. W. Fennell, collector 6th district, Kentucky	4,263,344 24	
A. M. Swope, collector 7th district, Kentucky	2,695,750 32	
W. J. Landrum, collector 8th district, Kentucky	889,233 67	
J. E. Blaine, collector 9th district, Kentucky	13,331 95	
G. Drury, collector, Louisiana	560,184 89	
F. J. Rollins, collector, Maine	56,599 19	
J. H. Sellman, collector, Maryland	3,135,091 38	
W. Bruce, collector 4th district, Maryland	11,628 54	
J. Hill, collector, Mississippi	50,823 15	
C. W. Slack, collector 3d district, Massachusetts	2,037,073 21	
C. C. Dame collector 5th district, Massachusetts	65,722 22	
E. R. Tinker, collector 10th district, Massachusetts	293,794 62	
J. H. Stone, collector 1st district, Michigan	1,202,425 86	
H. B. Rawlson, collector 3d district, Michigan	15,146 52	
C. W. Watkins, collector 4th district, Michigan	180,283 95	
H. O. Ripley, collector 6th district, Michigan	19,756 85	
A. C. Wedge, collector 1st district, Minnesota	12,785 86	
W. Bickel, collector, Minnesota	478,175 70	
I. H. Sturgeon, collector 1st district, Missouri	4,995,427 53	
A. B. Carroll, collector 2d district Missouri	4,707 35	
D. A. Stewart, collector 4th district, Missouri	268,191 79	
D. B. Langston, collector 5th district, Missouri	8,807 13	
P. Doppler, collector 6th district, Missouri	1,201,157 39	
T. P. Fuller, collector, Montana	123,278 52	
C. A. Smith, late collector, New Mexico	4,740 11	
S. W. Fisher, collector, New Mexico	63,793 20	
F. C. Lord, collector, Nevada	4,626 44	
G. W. Post, collector, Nebraska	1,515,802 98	
H. M. Putney, collector, New Hampshire	389,953 89	
W. P. Tatem, collector 1st district, New Jersey	130,666 55	
C. Barcalow, collector 3d district, New Jersey	491,159 03	
A. B. Hathorne, collector 5th district, New Jersey	2,858,372 71	
R. C. Ward, collector 1st district, New York	2,685,803 96	
M. B. Blake, collector 2d district, New York	1,576,683 43	
M. Freidsam, collector 3d district, New York	4,955,927 46	
M. D. Steven, collector 11th district, New York	14,735 48	
J. M. Johnson, collector 12th district, New York	54,953 52	
J. W. Bentley, collector 14th district, New York	635,392 06	
J. S. Smart, collector 15th district, New York	775,310 99	
J. Armsburg, collector 21st district, New York	885,283 72	
J. N. Knapp, collector 24th district, New York	41,821 21	
B. De Voe, collector 26th district, New York	17,540 32	
H. S. Pierce, collector 28th district, New York	2,014,647 98	
F. Buell, collector 30th district, New York	115,059 65	
E. A. White, collector 2d district, North Carolina	1,717 37	
I. J. Young, collector 4th district, North Carolina	519,769 08	
G. B. Everett, late collector 5th district, North Carolina	44,243 16	
W. W. Wheeler, collector 5th district, North Carolina	711,299 15	
T. N. Cooper, collector 6th district North Carolina	483,580 24	
C. B. Montgomery, collector 1st district, Ohio	9,826,123 39	
R. Williams, jr., collector 3d district, Ohio	69,097 55	
R. P. Kennedy, collector 4th district, Ohio	7,645 67	
G. P. Dunham, collector 6th district, Ohio	1,014,806 97	
C. B. Walcott, collector 7th district, Ohio	24,159 86	
J. T. Kumler, collector 10th district, Ohio	658,748 84	
M. Boggs, collector 11th district, Ohio	1,122,995 23	
J. Palmer, collector 15th district, Ohio	10,507 53	
W. S. Streeter, collector 18th district, Ohio	785,323 60	
J. C. Cartwright, collector, Oregon	128,661 63	
W. J. Pollock, collector 1st district, Pennsylvania	2,948,976 02	
J. T. Valentine, collector 8th district, Pennsylvania	62,204 09	
A. J. Kauffman, collector 9th district, Pennsylvania	1,251,083 57	
E. H. Chase, collector 12th district, Pennsylvania	438,649 66	
C. J. Bruner, collector 14th district, Pennsylvania	28,849 50	
E. Scull, collector 16th district, Pennsylvania	32,264 38	
C. M. Lynch, late collector 19th district, Pennsylvania	7,278 51	
J. T. Walker, collector 19th district, Pennsylvania	132,237 53	
J. C. Brown, collector 20th district, Pennsylvania	4,303 47	
F. P. Case, collector, 22d district, Pennsylvania	1,929,035 33	
S. M. Jackson, collector 23d district, Pennsylvania	1,049,818 32	
E. H. Rhodes, collector, Rhode Island	130,468 11	
E. W. Ferris, late collector, South Carolina	275 95	
E. M. Brayton, collector, South Carolina	93,624 44	
J. M. Melton, collector 2d district, Tennessee	110,668 43	
A. M. Hughes, jr., collector 5th district, Tennessee	1,135,476 85	
B. T Patterson, collector 8th district, Tennessee	4,469 26	
W. H. Sinclair, collector 1st district, Texas	72,654 53	
B. C. Ludlow, collector 3d district, Texas	65,267 52	
W. Umbdenstock, collector 4th district, Texas	72,811 90	
O. J. Hollister, collector, Utah	4,560 49	
Carried forward	114,754,591 18	204,878,194 77

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.				
	Brought forward	$1,129,352 18		$13,590,478 71
16	Salaries, assay office, Saint Louis	3,500 00		
16	Wages and contingent expenses, assay office, Saint Louis	1,848 41		
16	Salaries, assay office, Helena, Mont	7,950 00		
16	Contingent expenses, assay office, Helena, Mont	11,901 69		
16	Wages of workmen, assay office, Helena, Mont	6,146 72		
16	Freight on bullion and coin	8,754 03		
8	Recoinage of gold and silver coins	1,049 52		
11	Coinage, standard silver dollars	136,963 51		
			1,307,466 06	
	Deduct repayments:			
16	Fixtures and apparatus, assay office, Saint Louis	$166 07		
16	Parting and refining bullion	12,624 59		
			12,790 66	
	Total expenses, mints and assay offices			1,294,675 40
	Territorial governments.			
16	Salaries, governor, &c., of Arizona		13,473 07	
17	Legislative expenses of Arizona		2,120 88	
17	Contingent expenses of Arizona		500 00	
17	Salaries, governor, &c., of Dakota		14,357 14	
17	Legislative expenses of Dakota		2,734 62	
17	Contingent expenses of Dakota		250 00	
17	Salaries, governor, &c., of Idaho		11,960 00	
17	Legislative expenses of Idaho		1,311 82	
17	Contingent expenses of Idaho		264 50	
17	Salaries, governor, &c., of Montana		13,121 89	
17	Legislative expenses of Montana		3,157 09	
17	Contingent expenses of Montana		500 00	
18	Salaries, governor, &c., of New Mexico		13,900 00	
18	Legislative expenses of New Mexico		16,840 76	
18	Contingent expenses of New Mexico		500 00	
18	Salaries, governor, &c., of Utah		14,050 00	
18	Legislative expenses of Utah		19,845 11	
18	Contingent expenses of Utah		500 00	
18	Salaries, governor, &c., of Washington		13,400 00	
18	Legislative expenses of Washington		20,341 14	
18	Contingent expenses of Washington		500 00	
18	Salaries, governor, &c., of Wyoming		12,460 43	
18	Legislative expenses of Wyoming		23,618 31	
18	Contingent expenses of Wyoming		500 00	
18	Contingent expenses of Utah Commission		20,415 44	
18	Compensation of Utah Commission		25,000 00	
18	Compensation and expenses of officers of elections, Utah		15,569 28	
	Total expenditures, Territorial governments			261,191 48
	District of Columbia.			
19	Improvements and repairs		527,606 72	
19	Constructing, repairing, and maintaining bridges		3,474 86	
19	Washington Asylum		44,225 45	
19	Georgetown Almshouse		1,786 90	
19	Hospital for the Insane		46,700 00	
19	Columbia Hospital for Women and Lying-in Asylum		15,000 00	
21	Furniture and fixtures, Hospital for Women and Lying-in Asylum		5,000 00	
19	Transportation of paupers and prisoners		2,700 05	
19	Reform School		29,950 00	
21	Reform School buildings		7,500 00	
19	Children's Hospital		5,000 00	
19	Saint Ann's Infant Asylum		5,000 00	
19	Industrial Home School		10,000 00	
19	National Association for Colored Women and Children		7,000 00	
19	Building for Association for Colored Women and Children		20,000 00	
19	Women's Christian Association		5,000 00	
19	Relief of the poor		14,961 98	
19	Salaries and contingent expenses, offices		144,043 02	
20	Public schools		463,918 04	
20	Buildings and grounds, public schools		69,779 48	
20	Metropolitan police		301,437 20	
20	Fire department		101,060 00	
20	Courts		15,314 60	
20	Markets		141 67	
20	Streets		261,646 60	
20	Health department		42,971 20	
21	Interest and sinking-fund		1,211,604 08	
21	Miscellaneous expenses		10,579 87	
21	Contingent expenses		2,617 28	
	Carried forward		3,376,019 00	15,146,345 59

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$114,754,591 18	$204,878,194 77
J. C. Stearns, collector, Vermont	30,713 31	
J. D. Brady, collector 2d district, Virginia	1,540,269 65	
O. H. Russell, collector 3d district, Virginia	139,641 47	
J. B. Raulston, collector 4th district, Virginia	729,111 45	
J. H. Rives, collector 5th district, Virginia	100,278 53	
B. B. Boots, late collector 6th district, Virginia	23,842 98	
W. E. Craig, collector 6th district, Virginia	702,425 57	
J. R. Hayden, collector, Washington Territory	7,887 37	
E. P. Snow, collector, Wyoming Territory	1,202 68	
I. H. Duval, collector, West Virginia	544,331 38	
F. H. Pierrepont, collector 2d district, West Virginia	15,236 99	
I. M. Bean, collector 1st district, Wisconsin	2,400,454 71	
H. Harnden, collector 2d district, Wisconsin	155,461 97	
H. M. Kutchin, collector 3d district, Wisconsin	252,114 93	
L. Lotridge, collector 6th district, Wisconsin	188,508 34	
		121,586,072 51
From consular fees.		
H. C. C. Astwood, consul-general, San Domingo	1,366 73	
C. C. Andrews, consul-general, Rio de Janeiro	5,751 05	
L. T. Adams, consul, Geneva	687 50	
C. M. Allen, consul, Bermuda	2,052 96	
D. Atwater, consul, Tahiti	558 67	
T. Adamson, consul, Panama	4,112 08	
H. L. Atherton, consul, Pernambuco	1,806 39	
A. Badeau, consul-general, London	11,326 53	
H. D. Bennett, vice-consular agent, Nantes	37 00	
S. H. M. Byers, consul, Zurich	2,951 73	
C. Bartlett, consul, Guadaloupe	1,330 05	
W. C. Burchard, consul, Ruatan and Truxillo	296 72	
B. H. Barrows, consul, Dublin	1,715 55	
M. S. Brewer, consul-general, Berlin	6,944 65	
C. P. Barnard, consul, Leghorn	1,273 92	
H. M. Brant, vice-consul, Callao	345 97	
E. L. Baker, consul, Buenos Ayres	2,845 71	
C. C. Bancroft, vice-consul, Calcutta	4,048 56	
J. M. Bailey, consul, Hamburg	4,250 55	
H. C. Buffington, consul, Wallaceburg	79 20	
W. S. Bird, consul, La Guayra	1,006 43	
S. P. Bayley, consul, Palermo	2,374 93	
F. Belli, vice-consul, Palermo	1,068 80	
H. N. Beach, consul, Puerto Cabello	1,929 40	
L. A. Bergholz, consul, Puerto Cabello	74 00	
E. P. Beauchamp, consul, Saint Gall	114 98	
S. S. Blodgett, consul, Prescott	4 04	
T. Canisius, consul, Apia	164 85	
A. J. Cassard, consul, Tampico	560 76	
D. E. Coon, commercial agent, Baracoa	96 85	
G. L. Catlin, consul, Stuttgart	1,733 94	
D. J. Crain, consul, Milan	1,372 99	
J. G. Crawford, consul, Coaticook	537 96	
F. M. Cheney, consul, Zanzibar	240 13	
R. S. Chilton, consul, Clifton	1,055 02	
F. D. Cheshire, vice-consul-general, Shanghai	1,588 41	
M. J. Cramer, consul-general, Switzerland	907 25	
E. Conroy, consul, San Juan	685 74	
O. N. Denny, consul-general, Shanghai	4,897 26	
A. Destruge, vice-consul, Guayaquil	434 27	
L. De R. Du Verge, consul, St. Paul de Loando	9 80	
J. T. Du Bois, consul, Aix-la-Chapelle	1,561 80	
J. Dittmer, vice-consul, Stettin	150 50	
H. P. Dill, consul, Guelph	285 00	
A. V. Dockery, consul, Leeds	1,898 67	
T. M. Dawson, consul, Apia	565 80	
S. W. Dabney, consul, Fayal	440 53	
B. O. Duncan, consul, Naples	411 50	
D. M. Dunn, late consul, Prince Edward's Island	1,197 92	
H. Davy, vice-consul, Newcastle	202 50	
C. Ewers, consul, Windsor	3,046 25	
D. Eckstein, consul, Amsterdam	2,279 04	
B. F. Farnham, consul, Bombay	667 10	
J. W. Farrand, vice-consul, San Domingo	313 73	
A. Francis, consul, Victoria	357 50	
A. P. Francia, vice-consul, Genoa	231 00	
P. Figyelmesy, consul, Demerara	1,461 63	
J. M. Francis, minister, Portugal	582 30	
J. Fletcher, consul, Genoa	1,315 63	
N. Fish, minister, Belgium	40 00	
W. G. Frye, consul-general, Halifax	2,950 71	
J. J. Flinn, consul, Chemnitz	1,809 24	
W. E. Goldsborough, consul, Amoy	1,409 42	
J. B. Glover, consul, Havre	4,533 66	
Carried forward	102,350 76	326,464,267 28

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.				
	Brought forward		$3,376,019 00	$15,146,345 59
21	Water fund		106,744 13	
21	Refunding taxes		2,021 73	
21	Telegraph and telephone service		14,325 69	
21	Washington Aqueduct		20,000 00	
21	Increasing water-supply of Washington		312,911 24	
21	Washington redemption fund		722 57	
22	Washington special-tax fund		8,174 74	
22	Redemption of tax-lien certificates		542 68	
22	Redemption of assessment certificates		1,618 88	
22	Redemption of Pennsylvania avenue paving scrip		207 89	
22	Payment of legal obligations		819 35	
22	New engine-house for engine No. 5		2,105 00	
22	Saint John's Church Orphanage		1,500 00	
22	Interest on 3.65 bonds		6,899 17	
21	Water main for protection of Government Printing Office		1,750 00	
			3,856,362 07	
	Deduct repayments:			
20	Buildings and grounds, Washington Asylum	$7 49		
21	Miscellaneous and contingent expenses	6 10		
21	Employment of the poor in filling up grounds	38 40		
22	Redemption of Pennsylvania avenue paving scrip, act of July 19, 1876	25		
22	Redemption of certain funded indebtedness	281,500 00		
20	Police station-houses	6 62		
			281,558 86	
	Total expenditures District of Columbia			3,574,803 21
	Coast Survey.			
22	Salaries Coast and Geodetic Survey		253,450 00	
22	Party expenses, Coast and Geodetic Survey		161,830 23	
22	Transcontinental works, Coast and Geodetic Survey		20,108 00	
22	Points for State surveys, Coast and Geodetic Survey		16,000 00	
22	Publishing observations, Coast and Geodetic Survey		3,000 00	
22	Coast and Geodetic. Survey, Western Division		374 85	
22	Repairs of vessels		27,000 00	
22	General expenses		57,839 75	
22	Steamer for Pacific coast		100,000 00	
			639,602 83	
	Deduct excess repayments:			
22	Coast and Geodetic Survey, Eastern Division	$178 82		
22	Observations of eclipse of the sun	5 01		
			183 83	
	Total expenditures Coast Survey			639,419 00
	War Department.			
22	Salaries office of Secretary		111,718 84	
23	Salaries office of Adjutant-General		688,077 23	
23	Salaries office of Inspector-General		3,720 00	
23	Salaries office of Quartermaster-General		237,879 87	
23	Compensation and expenses agents Quartermaster's Department		29,666 39	
23	Salaries office of Commissary General		43,621 84	
23	Salaries office of Surgeon-General		528,925 06	
23	Salaries office of Paymaster-General		64,390 89	
23	Salaries office of Military Justice		13,072 04	
23	Salaries office of Chief of Engineers		23,198 26	
23	Salaries office of Chief of Ordnance		44,743 51	
23	Salaries office of Signal Officer		49,016 59	
23	Salaries office of Publication of Records of the Rebellion		34,369 87	
23	Salaries superintendent building cornerSeventeenth and F streets		5,914 86	
	Contingent expenses:			
23	Office of the Secretary		1,312 57	
24	War Department		49,992 50	
24	Stationery		28,728 74	
	Miscellaneous:			
23	Support and medical treatment of transient paupers		15,000 00	
23	Postage		120,110 39	
23	Postage to Postal-Union countries		1,900 00	
24	Rent of buildings		39,020 00	
	Public buildings and grounds:			
23	Telegraph to connect Capitol with the Departments and Government Printing Office		998 37	
24	Salaries of employés		41 904 64	
24	Contingent expenses		500 00	
	Carried forward		2,177,782 46	19,360,567 80

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$102,350 76	$326,464,267 28
W. F. Gunnell, consul, Bremen	4,713 06	
T. D. Golding, vice-consul La Guayra	36 68	
S. Goutier, consul, Cape Haytien	1,037 77	
G. W. Griffin, consul, Auckland	931 31	
W. H. Garfield, consul, Martinique	996 39	
J. A. Halderman, consul-general, Bangkok	16 30	
F. W. Hyndman, vice-consul, Charlottetown	200 00	
G. H. Horstman, consul, Nuremberg	2,724 82	
O. Hatfield, consul, Batavia	1,132 10	
C. C. Hirschfelder, consul, Toronto	845 50	
J. W. Harper, consul, Munich	1,356 25	
D. K. Hobart, consul, Windsor	928 39	
S. P. Hubbell, consul, St. John's	1,693 83	
R. Y. Holley, consul, Barbadoes	1,211 49	
G. H. Heap, consul-general, Constantinople	676 00	
F. G. Haughwout, consul, Naples	851 50	
B. Harte, consul, Glasgow	4,246 93	
J. F. Hazelton, consul, Genoa	1,259 50	
J. Hutchinson, vice-consul, Funchal	41 50	
W. C. Howells, consul, Toronto	978 65	
G. H. Holt, consul, Gaspé Basin	37 00	
W. H. Hunt, minister, Russia	85 00	
G. E. Hoskinson, consul, Kingston	1,514 10	
W. E. Howard, consul, Toronto	1,913 06	
H. O. Heffter, vice-consul, Leipsic	783 50	
J. F. Hartranft, collector of customs, Philadelphia, Pa	1 00	
E. Johnson, consul, Pictou	129 50	
E. R. Jones, consul, Newcastle	1,108 25	
C. E. Jackson, consul, Antigua	358 22	
A. C. Jones, consul, Nagasaki	221 17	
A. Jourdan, consul, Algiers	111 93	
C. Kahlo, consul, Sydney	3,263 67	
W. King, consul, Birmingham	3,576 90	
C. Klinck, late acting consul, Manila	423 67	
H. Keifer, consul, Stettin	162 50	
W. Koster, vice-consul, Mannheim	97 82	
P. Large, consul, St. Stephen	345 78	
J. C. Landreau, consul, Santiago de Cuba	1,056 62	
J. Low, consul, Clifton	763 75	
F. Leland, consul, Hamilton	801 16	
R. Locke, consul, Newcastle	237 50	
L. A. Lathrop, consul, Bristol	704 71	
E. E. Lane, consul, Tunstall	3,394 20	
L. D. Lyle, consul, Funchal	97 11	
J. A. Leonard, consul, Leith	1,753 63	
J. A. Lewis, consul, Sierra Leone	248 92	
J. M. Langston, minister, Hayti	1,351 69	
H. S. Laser, consul, Port Stanley	149 86	
G. F. Lincoln, consul, Stettin	939 47	
W. B. Lovie, vice-consul, Cardiff	262 47	
H. S. Loring, vice-consul, Kong-Kong	1,754 60	
A. Moller, jr., vice-consul, Valparaiso	901 83	
E. A. Merritt, consul-general, London	10,657 34	
H. Matson, consul, Calcutta	3,687 65	
J. T. Mason, consul, Dresden	2,502 50	
J. A. MacKnight, consul, St. Helena	411 54	
D. A. McKinley, consul Honolulu	6,743 03	
H. C. Marston, consul, Malaga	1,150 26	
G. F. Mosher, consul, Nice	3,262 48	
J. H. Moore, consul, Callao	117 26	
P. H. Morgan, minister, Mexico	170 00	
L. P. Morton, minister, France	532 61	
W. Moray, consul, Ceylon	514 09	
W. E. Meyer, acting consul, Para	495 57	
S. Merrill, consul, Jerusalem	42 75	
T. J. McLane, jr., Nassau	1,324 51	
H. M. Moore, vice-consul, Callao	17 17	
Morton, Rose & Co., bankers, London	175,036 38	
B. Mackey, consul, Rio Grande do Sul	141 91	
F. H. Mason, consul, Basle	2,317 27	
J. S. Martin, jr., consul, Marseilles	2,556 40	
F. A. Matthews, consul, Tangiers	17 55	
J. S. Mosby, consul, Hong-Kong	1,602 50	
H. C. Miller, consul, Guayaquil	444 00	
A. M. Mothershead, late consul, Leipsic	25	
L. H. Mitchell, vice-consul, London	326 08	
M. W. B. Noyes, consul, Venice	678 50	
J. A. Nunez, commercial agent, Cardenas	779 96	
E. L. Oppenheim, consul, Cadiz	1,390 65	
T. A. Osborn, minister, Brazil	45 00	
G. H. Owen, consul, Messina	1,986 60	
W. A. Puller, vice-consul, Rio Grande do Sul	383 33	
Carried forward	376,114 96	326,464,267 28

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.				
	Brought forward		$2,177,782 46	$19,360,567 80
	Public Buildings and Grounds:			
24	Improvement and care		78,789 09	
24	Executive Mansion, repairs, fuel, &c		32,999 34	
24	Executive Mansion, lighting, &c		14,971 53	
24	Repairs to water-pipes and fire-plugs		2,498 33	
24	Building for State, War, and Navy Departments		435,000 00	
24	Furniture and carpets for War, State, and Navy Departments		10,000 00	
24	Fuel, lights, &c., for State, War, and Navy Departments		34,000 00	
24	Salaries office superintendent for State, War, and Navy Departments		81,600 00	
24	Completion of Washington Monument		176,000 00	
24	Rent of office buildings		900 00	
24	Pedestal for statue of Rear-Admiral S. F. Du Pont		2,800 00	
			3,047,340 75	
	Deduct repayments:			
23	Salaries civil employes in lieu of general-service or detailed enlisted men	$34 43		
23	Salary superintendent War Department building	13 32		
23	Salary superintendent building on F street	8 98		
23	Transportation of reports and maps to foreign countries	82 31		
24	Rent of building office Adjutant-General	1,000 00		
24	Building State, War, and Navy Departments, south wing	450 66		
24	Contingent expenses office Paymaster-General	179 16		
24	Contingent expenses office Publication of the Records of the Rebellion	56 48		
24	Contingent expenses War Department building	82 96		
			1,908 30	
	Total expenditures War Department			3,045 432 45
	Navy Department.			
24	Salaries office of the Secretary		54,146 22	
24	Salaries Bureau Yards and Docks		11,980 00	
24	Salaries Bureau Equipment and Recruiting		14,261 62	
24	Salaries Bureau of Navigation		11,340 00	
24	Salaries Bureau of Ordnance		7,980 00	
24	Salaries Bureau Construction and Repair		12,159 12	
24	Salaries Bureau Steam Engineering		12,290 00	
24	Salaries Bureau of Provisions and Clothing		17,449 24	
24	Salaries Bureau of Medicine and Surgery		9,370 45	
24	Salaries Nautical Almanac Office		23,000 00	
24	Salaries office Judge-Advocate-General United States Navy		5,648 72	
25	Salaries Hydrographic Office		38,716 05	
25	Salaries Naval Observatory		17,384 13	
25	Contingent expenses		11,000 00	
25	Contingent and miscellaneous expenses Hydrographic Office		14,276 50	
25	Contingent and miscellaneous expenses Naval Observatory		9,436 00	
25	Library		1,163 10	
25	Postage		45 00	
			271,646 15	
	Deduct repayments:			
25	Salaries superintendent, &c., Navy Department building	$0 55		
25	Contingent and miscellaneous expenses Nautical Almanac Office	42 15		
			42 70	
	Total expenses Navy Department			271,603 45
	Post-Office Department.			
25	Salaries		658 612 60	
	Contingent expenses:			
25	Stationery		9,000 00	
25	Fuel		7,200 00	
25	Gas		4,600 00	
25	Plumbing and gas-fixtures		2,500 00	
25	Telegraphing		3,896 71	
25	Printing		4,700 00	
25	Carpets		5,900 00	
25	Furniture		6,200 00	
25	Horses and wagons		1,000 00	
25	Hardware		1,700 00	
26	Miscellaneous items		9,000 00	
26	Rent		9,500 00	
	Carried forward		723,809 31	22,677,603 70

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$376,114 96	$326,464,267 28
S. D. Pace, consul, Port Sarnia	1,413 50	
S. B. Packard, consul, Liverpool	14,167 10	
L. W. Pilcher, vice-consul, Tientsin	104 87	
J. L. Parish, consul, Chemnitz	1,565 15	
La Rue Peck, consul, Fort Erie	1,154 50	
B. F. Peixotto, consul, Lyons	4,897 49	
J. J. Piatt, consul, Cork	442 87	
F. Paul, consul, Odessa	185 50	
J. S. Potter, consul, Crefeld	7,483 36	
E. H. Plumacher, consul, Maracaibo	2,210 20	
C. A. Phelps, consul, Prague	2,728 01	
W. P. Pierce, consul, Cienfuegos	1,816 21	
T. T. Prentiss, consul, Port Louis	114 45	
A. C. Prindle, consul, Bahia	1,598 05	
G. P. Pomeroy, consul-general, Cairo	285 00	
B. S. Parker, consul, Sherbrooke	1,495 88	
H. Pease, consul, Santiago, Cape Verde Islands	60 06	
B. J. Pridgen, vice-consul, Piedras Negras	383 75	
F. M. Rice, consul, Colon	2,709 47	
R. B. Robbins, commercial agent, Ottawa	5,058 78	
A. Rhodes, late consul, Rouen	70	
L. Richmond, consul-general, Rome	650 00	
J. T. Robeson, consul, Tripoli	50 00	
D. T. Reed, chargé d'affaires, Spain	17 50	
A. L. Russell, consul, Montevideo	997 31	
E. D. Ropes, vice-consul, Zanzibar	43 33	
R. B. Ryder, consul, Copenhagen	968 05	
G. W. Roosevelt, consul, Bordeaux	3,683 08	
W. W. Randall, consul, Sabanilla	2,794 24	
W. F. Rowland, late consul, Nice	54 50	
W. Schuchardt, vice-consul, Piedras Negras	129 00	
S. P. Stearns, consul-general, Montreal	4,168 83	
H. L. Slaight, consul, Prescott	1,594 15	
S. Spackman, consul, Cologne	2,411 98	
W. W. Sikes, consul, Cardiff	492 39	
H. J. Sprague, consul, Gibraltar	575 91	
J. H. Steuart, consul, Antwerp	3,595 60	
J. Smith, commercial agent, Nottingham	3,491 36	
W. E. Stevens, consul, Smyrna	1,650 50	
E. M. Smith, consul, Maranham	1,912 41	
V. V. Smith, consul, St. Thomas	514 29	
J. Stahel, consul, Osaka and Hiogo	3,537 85	
J. A. Sutter, consul, Acapulco	840 20	
S. H. Smith, consul, Nuevo Laredo	1,169 22	
W. Schoenle, consul, Barmen	3,434 76	
J. L. Stevens, minister, Sweden and Norway	35 00	
A. A. Sargent, minister, Germany	1,145 00	
A. G. Studer, consul, Singapore	1,885 36	
D. H. Strother, consul-general, Mexico	66 00	
A. D. Shaw, consul, Manchester	5,259 26	
W. P. Sutton, consul, Matamoros	604 50	
E. J. Smithers, consul, Chin Kiang	258 64	
O. M. Spencer, consul-general, Melbourne	915 68	
I. F. Shepard, consul, Hankow	353 04	
C. Seymour, consul, Canton	1,481 50	
E. Stevens, consul, Ningpo	64 14	
A. Stein, vice-consul, Brussels	224 19	
J. W. Siler, consul, Cape Town	568 13	
J. F. Swords, late commercial agent, Sagua la Grande, Cuba	60 58	
F. H. Scheuch, consul, Barcelona	300 85	
N. K. Sawyer, consul, Turk's Island	590 06	
J. H. Smyth, minister, Liberia	45 81	
B. Tzschuck, consul, Vera Cruz	5,295 20	
W. H. Trumbull, vice-consul, Zanzibar	84 88	
M. H. Twitchell, consul, Kingston	1,287 50	
R. W. Turpin, vice-consul, Panama	226 19	
J. W. Taylor, consul, Winnipeg	470 00	
G. C. Tanner, consul, Verviers and Liege	1,746 96	
A. V. Tousley, consul, Trieste	1,572 11	
A. Taft, minister, Austria	155 00	
W. Thompson, consul, Southampton	268 50	
H. A. Taylor, consul, Marseilles	629 09	
J. Turner, consul, Amherstburg	1,239 50	
R. D. Tucker, consul, Manila	971 29	
J. M. True, late consul, Kingston	90 05	
J. F. Van Ingen, consul, Talcahuano	627 66	
D. Vickers, consul, Matanzas	2,759 48	
F. Vogeler, consul, Frankfort	5,169 19	
T. B. Van Buren, consul, Kanagawa	9,344 63	
F. Visich, vice-consul, Trieste	1,806 59	
A. Van Camp, commercial agent, Lanthala	18 71	
Carried forward	512,384 59	326,464,267 28

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.			
	Brought forward	$723,809 31	$22,677,603 70
	Contingent expenses:		
26	Publication of Official Postal Guide	29,000 00	
26	Publication of post-route maps	15,000 00	
		767,809 31	
26	Deduct repayment: Post-Office Department building, refitting rooms	500 37	
	Total expenses Post-Office Department		767,308 94
	Department of Agriculture.		
26	Salaries	$127,675 49	
26	Collecting agricultural statistics	79,500 00	
26	Purchase and distribution of valuable seeds	75,000 00	
26	Experimental garden	7,200 00	
26	Museum	1,500 00	
26	Laboratory	16,800 00	
26	Furniture, cases, and repairs	6,000 00	
26	Library	1,500 00	
26	Investigating history of insects injurious to agriculture	19,470 10	
26	Investigating diseases of domesticated animals	24,298 41	
26	Investigating diseases of swine and other domesticated animals	3,584 28	
26	Reclamation of arid and waste lands	15,963 25	
26	Report on forestry	11,877 03	
26	Contingent expenses	13,500 00	
26	Postage	3,977 49	
26	Improvement of grounds	8,000 00	
26	Experiments in the manufacture of sugar	5,454 60	
26	Building	2,500 00	
26	Experiments in the culture of tea	505 66	
26	Examination of wools and animal fibers	264 04	
26	Transporting for permanent exhibition certain agricultural and mineral specimens exhibited at Atlanta, Ga	600 00	
	Total expenditures Agricultural Department		425,170 35
	Department of Justice.		
27	Salaries, justices, &c., U. S. Supreme Court	93,500 00	
27	Salaries and expenses, offices clerk U. S. Supreme Court	8,000 00	
27	Salaries of circuit judges	52,368 12	
27	Salaries of retired U. S. judges	42,711 20	
27	Salaries of district judges	200,279 18	
27	Salaries of justices &c., supreme court, District Columbia	24,500 00	
27	Salaries of district attorneys	20,325 22	
28	Salaries of district marshals	13,093 36	
28	Salaries and expenses, reporter U. S. Supreme Court	8,700 00	
	Total expenditures Department of Justice		463,477 08
	Steamboat Inspection Service.		
29	Salaries	199,000 00	
29	Contingent expenses	42,894 73	
11	Salaries and expenses of special inspectors of foreign steam-vessels	37,596 05	
	Total expenditures steamboat inspection service		279,490 78
	Public buildings, Treasury.		
30	Court-house, post-office, &c., Abingdon, Va	150 50	
30	Court-house, post-office, &c., Atlanta, Ga	1,140 79	
30	Post-office and subtreasury, Boston, Mass	191,798 90	
30	Post-office, court-house, &c., Baltimore, Md	149,448 75	
30	Post-office, &c., Brooklyn, N. Y	408,565 40	
31	Post-office, court-house, &c., Charleston, W. Va	13,001 75	
31	Post-office, court-house, &c., Columbus, Ohio	29,152 46	
31	Post-office, &c., Council Bluffs, Iowa	6,508 65	
31	Court-house, post-office, &c., Concord, N. H	58,096 38	
31	Court-house, and post-office, Des Moines, Iowa	12,412 39	
31	Court-house, post-office, &c., Detroit, Mich	12,794 13	
31	Court-house, Dover, Del	35 84	
31	Court-house, post-office, &c., Dallas, Tex	14,562 50	
31	Court-house, post-office, &c., Denver, Colo	65,510 00	
31	Court-house, post-office, &c., Erie, Pa	5,799 15	
31	Court-house, post-office, &c., Fort Wayne, Ind	25,261 95	
31	Court-house and post-office, Frankfort, Ky	27,218 30	
31	Court-house and post-office, Grand Rapids, Mich	464 00	
31	Court-house, post-office, &c., Greensborough, N. C	13,400 00	
	Carried forward	1,035,321 84	24,613,050 85

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$512,386 59	$326,464,267 28
J. G. Voigt, commercial agent, Manila	375 00	
A. Vial, vice-consul, Nice	289 00	
J. N. Wason, consul, Quebec	457 67	
J. M. Wilson, consul, Bremen	3,778 64	
A. B. Wood, consul, Belfast	4,574 76	
J. R. Weaver, secretary legation, Vienna	5,996 68	
W. L. Welsh, consul, Florence	1,998 75	
J. B. Weaver, consul, Bahia	997 65	
C. B. Webster, consul, Sheffield	3,589 40	
T. Wilson, commercial agent, Nantes	263 50	
W. B. Wells, consul, Dundee	3,491 98	
J. Wilson, consul, Brussels	2,666 31	
J. F. Winter, consul, Rotterdam	2,307 35	
D. B. Warren, consul, St. John	2,859 76	
J. C. A. Wingate, consul, Swatow	444 46	
G. Walker, consul-general, Paris	12,195 78	
A. Willard, consul, Guaymas	949 30	
R. M. Whitney, consul, Tamatave	80 31	
W. A. Warden, consul, Charlottetown	376 07	
J. Worthington, consul, Malta	61 50	
C. M. Wood, consul-general, Rome	115 50	
J. G. Wright, commercial agent, Manila	295 66	
E. A. Youngs, late vice-consul, Manila	264 95	
J. C. Zuck, consul, Tien-Tsin	202 29	
F. C. Zimmerman, acting consul, Chemnitz	375 00	
		561,393 86

From steamboat fees.

R. Armstrong, collector, Dubuque, Iowa	804 15	
J. A. P. Allen, collector, New Bedford, Mass	429 25	
R. Alverez, deputy collector, Key West, Fla	25 00	
W. L. Ashmore, collector, Burlington, N. J	164 35	
I. S. Adams, collector, Frenchman's Bay, Me	76 20	
M. R. Barr, collector, Erie, Pa	50 00	
J. R. Brierly, collector, Wilmington, Cal	155 35	
A. S. Badger, collector, New Orleans, La	7,198 05	
J. W. Burke, collector, Mobile, Ala	1,433 65	
A. W. Bash, collector, Puget Sound, Wash	2,624 15	
A. H. Beach, collector, Wheeling, W. Va	4,245 95	
J. D. Bowie, collector, Petersburg, Va	50 00	
A. J. Beers, collector, New Haven, Conn	848 75	
J. Brady, jr., collector, Fall River, Mass	1,025 15	
D. V. Bell, collector, Detroit, Mich	1,278 05	
J. Bookwalter, collector, Minnesota, Minn	1,353 55	
W. A. Baldwin, collector, Newark, N. J	591 15	
G. E. Bowden, collector, Norfolk, Va	2,448 65	
J. B. Batelle, collector, Miami, Ohio	1,007 20	
C. Borer, collector, Galena, Ill	737 95	
George Bliss, acting collector, Waldoborough, Me	51 10	
F. J. Babson, collector, Gloucester, Mass	178 50	
J. M. Boardman, collector, Belfast, Me	25 00	
T. F. Cassels, collector, Memphis, Tenn	2,417 80	
R. C. Crowell, collector, Kansas City, Mo	210 55	
J. Campbell, collector, Omaha, Nebr	404 60	
J. H. Cozzens, collector, Newport, R. I	444 44	
J. Coins, collector, Bristol, R. I	17 70	
B. C. Cook, collector, Richmond, Va	363 55	
J. W. Cobbs, collector, Paducah, Ky	250 50	
W. H. Daniels, collector, Oswegatchie, N. Y	358 60	
D. F. Davis, collector, Bangor, Me	257 35	
F. N. Dow, collector, Portland, Me	1,550 87	
J. F. Dravo, collector, Pittsburgh, Pa	4,614 05	
A. C. Davis, collector, Beaufort, N. C	75 00	
S. H. Doten, collector, Plymouth, Mass	25 00	
M. A. Edgar, collector, Perth Amboy, N. J	607 10	
J. H. Elmer, collector, Bridgeton, N. J	156 90	
G. Fisher, collector, Cairo, Ill	850 10	
B. Flagler, collector, Niagara, N. Y	33 35	
H. P. Farrow, collector, Brunswick, Ga	275 00	
J. K. Faulkner, collector, Louisville, Ky	2,397 20	
W. R. Finch, collector, La Crosse, Wis	757 60	
G. Frazee, collector, Burlington, N. J	931 10	
J. H. Gray, collector, Alexandria, Va	329 80	
J. L. Gaston, collector, Chattanooga, Tenn	395 90	
C. A. Gould, collector, Buffalo, N. Y	7,044 25	
F. B. Goss, collector, Barnstable, Mass	25 00	
E. Higgins, collector, Saint John's, Fla	1,665 91	
T. A. Henry, collector, Pamlico, N. C	502 35	
G. Holmes, collector, Beaufort, S. C	125 00	
Carried forward	53,887 72	327,025,661 14

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page				
	Brought forward		$1,035,321 84	$24,613,050 85
31	Court-house, post-office, &c., Harrisonburg, Va		12,003 00	
31	Post-office, &c., Hannibal, Mo		13,615 50	
31	Court-house, and post-office, Indianapolis, Ind		45 00	
31	Court-house and post-office, Jackson, Miss		42,355 83	
31	Court-house, post office, &c., Jackson, Tenn		6,842 00	
32	Court-house, post-office, &c., Jefferson City, Mo		15,602 55	
32	Post-office, &c., Jersey City, N. J		1,758 20	
32	Court-house, post-office, &c., Lynchburg, Va		13,761 75	
32	Court-house, post-office, &c., Little Rock, Ark		259 61	
32	Court-house, post-office, &c., Leavenworth, Kans		10,031 50	
32	Court-house, post-office, &c., Louisville, Ky		329 10	
32	Post-office, &c., Minneapolis, Minn		64,455 78	
32	Court-house and post-office, Montgomery, Ala		34,550 67	
32	Court-house and post-office, Marquette, Mich		7,459 00	
32	Court-house, post-office, &c., Oxford, Miss		6,126 90	
32	Court-house, post-office, &c., Philadelphia, Pa		381,840 68	
32	Court-house, post-office, &c., Pittsburgh, Pa		84,159 32	
32	Court-house, post-office, &c., Pensacola, Fla		8,923 60	
32	Court-house, post-office, &c., Peoria, Ill		26,999 95	
32	Post-office, &c., Poughkeepsie, N. Y		37,295 20	
32	Court-house and post-office, Parkersburg, W. Va		84 35	
32	Court-house and post-office, Paducah, Ky		3,660 81	
33	Court-house and post-office, Quincy, Ill		15,311 94	
33	Court-house and post-office, Raleigh, N. C		33 75	
33	Court-house and post-office, Rochester, N. Y		17,102 47	
33	Court-house and post-office, Syracuse, N. Y		13,136 24	
33	Subtreasury building, San Francisco, Cal		17 75	
33	Post-office, &c., Scranton, Pa		422 05	
33	Post-office, &c., Saint Joseph, Mo		915 50	
33	Post-office, court-house, &c., Shreveport, La		10,000 00	
33	Post-office, court-house, &c., Topeka, Kans		52,323 85	
33	Post-office, court-house, &c., Trenton, N. J		31 60	
33	Post-office, Terre Haute, Ind		26,643 15	
33	Post-office, court-house, &c., Utica, N. Y		3 00	
33	Post-office, court-house, &c., Williamsport, Pa		81 24	
33	Treasury building, Washington, D. C		5,000 00	
			1,948,504 68	
	Deduct repayments:			
30	Court-house, post-office, &c., Austin, Tex	$0 08		
31	Court-house and post-office, Covington, Ky	114 29		
31	Court-house and post-office, Danville, Va	24 42		
31	Court-house and post-office, Harrisburg, Pa	1,081 95		
32	Court-house, post-office, &c., Lincoln, Nebr	84 96		
32	Court-house and post-office, &c., New York, N. Y	649 93		
			1,955 63	
	Total expense, public buildings, Treasury			1,946,549 05

Diplomatic.

33	Salaries of ministers	237,148 09
34	Salaries of secretaries of legations	26,947 30
34	Extending diplomatic relations with Governments of Eastern Asia	3,750 00
34	Contingent expenses of foreign missions	90,678 49
35	Salaries, consular service	394,165 34
39	Allowance for consular clerks	60,054 99
41	Salaries, interpreters to consulates in China, Japan, and Siam	16,323 70
41	Salaries, consular officers not citizens	8,843 99
42	Salaries, marshals for consular courts	7,036 07
42	Boat and crew for consul at Osaka and Hiogo	326 49
42	Steam-launch for legation and consulate at Constantinople	1,000 00
42	Expenses of interpreters, guards, &c., Turkish dominions	2,165 16
42	Loss on bills of exchange, consular service	6,362 09
42	Contingent expenses, U. S. consulates	107,588 11
45	Rent of prisons, wages of keepers, &c., for American convicts in Siam and Turkey	1,117 31
46	Rent of prisons for American convicts in China	1,028 82
46	Rent of prisons for American convicts in Japan	450 00
46	Wages of keepers of prisons for American convicts in China	6,960 82
46	Wages of keepers of prisons for American convicts in Japan	1,837 07
46	Rent of court-house and jail in Japan	3,400 00
46	Building and grounds for legation in China	2,069 93
46	Bringing home criminals	1,277 95
49	Rescuing shipwrecked American seamen	1,765 29
49	Shipping and discharging seamen	3,709 10
49	Expenses under the neutrality act	25,993 80
49	Annual repairs of Cape Spartel light-house	285 00
49	Allowance to widows or heirs of diplomatic officers who die abroad	3,008 56
	Carried forward	1,017,293 47 26,559,599 90

General account of the receipts and expenditures of the United States, &c.—Continued

TO RECEIPTS.

Brought forward	$53,887 72	$327,025,661 14
J. Hirst, collector, Saint Mark's, Fla	204 30	
J. F. Hartranft, collector, Philadelphia, Pa	8,691 50	
W. P. Hiller, collector, Nantucket, Mass	25 00	
J. D. Hopkins, collector, Frenchman's Bay, Me	200 00	
J. S. Hanover, collector, Fairfield, Conn	646 25	
W. F. Huse, collector, Newburyport, Mass	403 92	
W. Hartsuff, collector, Huron, Mich	4,544 75	
G. W. Howe, collector, Cuyahoga, Ohio	4,196 70	
C. Harris, collector, Providence, R. I	4,582 45	
A. W. Hall, collector, Milwaukee, Wis	4,780 85	
A. F. Howard, collector, Portsmouth, N. H	150 00	
H. F. Heriot, collector, Georgetown, S. C	267 25	
W. M. Haycock, collector, Passamaquoddy, Me	100 40	
W. G. Henderson, collector, Pearl River, Miss	201 50	
J. L. Haynes, collector, Brazos, Tex	110 65	
J. W. Howell, collector, Fernandina, Fla	50 00	
J. Hunter, collector, Saint Joseph's, Mo	76 80	
T. Ireland, collector, Annapolis, Md	25 00	
T. F. Johnson, collector, Savannah, Ga	1,673 30	
J. C. Jewell, collector, Evansville, Ind	1,543 85	
T. B. Johnston, collector, Charleston, S. C	1,111 05	
J. R. Jolley, collector, Teche, La	979 50	
G. A. Johnson, collector, San Diego, Cal	75 00	
F. A. Kennedy, collector, Waldoborough, Me	50 00	
J. M. Kirchwal, collector, Nashville, Tenn	623 15	
I. Lord, collector, Saco, Me	59 10	
W. Lowen, collector, Sag Harbor, N. Y	218 75	
J. J. Lamaree, collector, Oswego, N. Y	681 79	
J. A. Luby, collector, Albany, N. Y	4,952 25	
H. Lawson, collector, Easton, Md	75 00	
W. Livingstone, collector, Detroit, Mich	3,818 15	
D. W. McClung, collector, Cincinnati, Ohio	3,601 05	
G. W. Mathis, collector, Little Egg Harbor, N. J	75 00	
D. McLaughlin, collector, Michigan, Mich	5,111 85	
J. D. Merryman, collector, Oregon, Oreg	811 10	
C. E. Morris, collector, Genesee, N. Y	25 00	
W. G. Morris, collector, Alaska, Alaska	175 00	
A. G. Malloy, collector, Galveston, Tex	970 65	
S. Moffett, collector, Champlain, N. Y	130 00	
W. C. Marshall, collector, Belfast, Me	25 00	
A. Newburger, collector, Natchez, Miss	50 00	
N. B. Nutt, acting collector, Passamaquoddy, Me	160 90	
C. F. Odell, collector, Salem, Mass	54 55	
C. Y. Osburn, collector, Superior, Mich	1,807 25	
W. H. Pratt, collector, Humboldt, Cal	225 00	
E. J. Pennypacker, collector, Wilmington, N. C	414 25	
J. L. Pierce, collector, Machias, Me	200 00	
A. Putnam, collector, Middletown, Conn	642 00	
W. H. Robertson, collector, New York, N. Y	28,279 55	
C. E. Robinson, collector, Albemarle, N. C	648 00	
C. Rude, collector, Sandusky, Ohio	853 00	
E. L. Sullivan, collector, San Francisco, Cal	5,858 40	
J. W. Short, collector, Vicksburg, Miss	1,004 50	
S. M. Sawyer, collector, Apalachicola, Fla	421 70	
J. Spalding, collector, Chicago, Ill	5,797 60	
F. N. Shurtleff, collector, Willamette, Oreg	3,379 80	
W. H. Sears, collector, San Francisco, Cal	1,458 85	
W. T. Simson, collector, Genesee, N. Y	175 00	
H. C. Stafford, collector, Erie, Pa	710 30	
V. Smith, collector, Duluth, Minn	717 55	
G. B. Sawyer, collector, Wiscasset, Me	25 00	
W. H. Sargent, collector, Castine, Me	25 00	
H. N. Trumbull, collector, Stonington, Conn	717 45	
J. A. Tibbetts, collector, New London, Conn	2,182 60	
L. Thompson, collector, Delaware, Del	1,218 25	
A. Tibbetts, collector, Paso del Norte, N. Mex	61 20	
G. Fox, collector, Cherrystone, Pa	100 00	
J. M. Tarble, collector, Pensacola, Fla	375 00	
B. Upton, jr., collector, Tappahannock, Va	25 00	
C. Van Clive, collector, Yaquina, Oregon	75 00	
C. B. Watson, collector, Southern Oregon	225 00	
F. E. Witzell, collector, Saint Augustine, Fla	150 00	
J. H. Wilson, collector, Georgetown, D. C	910 70	
C. M. Whitney, collector, Saint Louis, Mo	5,491 87	
E. H. Webster, collector, Baltimore, Md	6,923 75	
G. W. Warren, collector, Cape Vincent, N. Y	879 55	
R. Worthington, collector, Boston, Mass	4,167 90	
J. W. Wakefield, collector, Bath, Me	678 35	
W. Wells, collector, Vermont, Vt	457 25	
F. N. Wicker, collector, Key West, Fla	177 45	
		183,755 10
Carried forward		327,209,41624

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.				
	Brought forward	$1,015,293 47		$26,559,599 90
50	Transporting remains of ministers and consuls to their homes for interment	2,415 78		
50	Publication of consular and other commercial reports	18,435 42		
50	International Bureau of Weights and Measures	3,537 63		
50	Joint Commission for Settlement of Claims between the United States and French Republic	46,154 38		
50	International Fishery Exhibition of 1883 at London	10,000 00		
50	International Commission for the Establishment of Electrical Units	8,500 00		
50	Commission to negotiate a commercial treaty with Mexico	2,208 33		
50	International Exchange, Smithsonian Institution	5,375 00		
50	Salary, burial expenses, &c., George P. Marsh, late minister to Italy	12,238 35		
50	Relief of J. J. Coffey and Rebecca S. Lewis	350 00		
50	Salaries and expenses Court of Commissioners Alabama Claims	181,400 00		
50	Salaries and expenses United States and Spanish Claims Commission	63 60		
50	Estates of decedents trust fund	36 90		
50	Relief of claimants for destruction of private armed brig General Armstrong	727 36		
		1,306,736 22		
	Deduct excess repayments:			
46	Relief and protection of American seamen	$8,749 78		
50	International remonetization of Silver	2,496 39		
50	International Bimetallic Commission	9,027 49		
50	International Exhibition at Sydney and Melbourne	1,994 83		
50	Contingent expenses United States and Spanish Claims Commission	50 26		
50	Expenses Universal Exhibition at Paris	23,651 10		
			45,969,85	
	Total expenses diplomatic			1,260,766 37
	JUDICIARY.			
51	Salaries Department of Justice		136,448 02	
51	Contingent expenses Department of Justice:			
51	Furniture and repairs		750 00	
51	Books for Department library		1,500 00	
51	Books for office of Solicitor		500 00	
51	Stationery		1,500 00	
51	Miscellaneous items		7,160 00	
51	Horses and wagons		1,200 00	
51	Salaries employés court-house, Washington, D. C		9,810 00	
51	Salary warden of jail, Washington, D. C		1,800 00	
51	Repairs of court-house, Washington, D. C		950 00	
51	Expenses of Territorial courts in Utah		25,971 55	
51	Defending suits in claims against the United States		6,422 30	
51	Prosecution and collection of claims		15 00	
51	Punishing violations of intercourse acts and frauds		4,619 88	
51	Prosecution of crimes		23,570 63	
51	Support of convicts		2,298 39	
51	Publishing supreme court reports, Territory of Wyoming		819 17	
51	Payment to Henry Fink, United States marshal		108 80	
52	Fees of supervisors of elections		18,109 42	
51	Expenses of United States courts		1,035 84	
52	Fees of jurors, United States courts		420,552 00	
53	Fees of witnesses, United States courts		589,140 68	
56	Support of prisoners, United States courts		236,985 51	
58	Miscellaneous expenses, United States courts		299,343 24	
61	Fees and expenses of marshals, United States courts		628,222 58	
63	Fees of attorneys, United States courts		311,389 87	
64	Fees of clerks, United States courts		142,435 07	
65	Rent of court-rooms, United States courts		55,085 63	
66	Fees of commissioners, United States courts		120,864 94	
			3,048,608 52	
	Deduct excess repayments:			
71	Payment of special deputy marshals at Congressional elections		4,568 00	
	Total expenses Judiciary			3,044,040 52
	CUSTOMS.			
71	Collecting revenue from customs		6,709,485 76	
75	Expenses Revenue Cutter Service		851,311 86	
76	Supplies of light-houses		348,585 84	
77	Repairs and incidental expenses of light-houses		312,880 91	
77	Salaries of keepers of light-houses		555,786 56	
78	Inspecting lights		2,524 25	
78	Expenses of light-vessels		206,630 82	
	Carried forward		8,987,206 03	30,864,406 79

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward		$327,209,416 24
FROM REGISTERS' AND RECEIVERS' FEES.		
J. H. Allen, receiver of public moneys, Fergus Falls, Minn	$8,207 71	
W. J. Anderson, receiver of public moneys, Grand Forks, Dak	38,214 50	
W. Anyan, receiver of public moneys, Grand Island, Nebr	50,918 65	
J. M. Adams, receiver of public moneys, Yakima, Wash	8,995 50	
J. E. Bogart, receiver of public moneys, Bozeman, Mont	22,00	
H. Barber, jr., receiver of public moneys, Mitchell, Dak	38,266 34	
H. O. Beatty, receiver of public moneys, Sacramento, Cal	1,518 56	
H. Booth, receiver of public moneys, Larned, Kans	30,974 63	
C. A. Brastow, receiver of public moneys, Del Norte, Colo	5,628 06	
G. B. Brooks, receiver of public moneys, East Saginaw, Mich	1,697 32	
E. Ballou, receiver of public moneys, Helena, Mont	13,597 00	
C. F. Babcock, receiver of public moneys, McCook, Nebr	24,447 12	
W. H. Bailhache, receiver of public moneys, Santa Fé, N. Mex	8,465 50	
V. W. Bayless, receiver of public moneys, Eau Claire, Wis	3,484 96	
M. M. Bane, receiver of public moneys, Salt Lake, Utah	12,673 50	
Z. L. Burton, receiver of public moneys, Helena, Mont	2,249 50	
C. G. Bell, receiver of public moneys, Bayfield, Wis	2,735 19	
James Braden, receiver of public moneys, Walla Walla, Wash	11,000 00	
E. P. Champlin, receiver of public moneys, Deadwood, Dak	11,699 00	
G. H. Crumb, receiver of public moneys, Ironton, Mo	8,302 67	
S. Cooper, receiver of public moneys, Humboldt, Cal	9,982 56	
C. H. Chamberlain, receiver of public moneys, San Francisco, Cal	22,917 78	
J. G. Chandler, receiver of public moneys, Yankton, Dak	15,645 51	
H. S. Cunningham, receiver of public moneys, Salina, Kans	15,577 81	
C. E. Chandler, receiver of public moneys, Oberlin, Kans	8,815 80	
G. B. Curry, receiver of public moneys, La Grande, Oreg	15,728 78	
E. S. Crocker, receiver of public moneys, Evanston, Wyo	1,466 07	
J. T. Carlin, receiver of public moneys, Bozeman, Mont	3,919 50	
B. Cameron, receiver of public moneys, Tucson, Ariz	79 00	
H. Carpenter, receiver of public moneys, Eureka, Nev	640 00	
C. E. Daily, receiver of public moneys, Tucson, Ariz	2,698 25	
J. Dumars, receiver of public moneys, Springfield, Mo	21,127 00	
A. Dobrowsky, receiver of public moneys, Shasta, Cal	10,269 66	
A. W. De Long, receiver of public moneys, Prescott, Ariz	1,504 90	
J. L. Dyer, receiver of public moneys, Wichita, Kans	11,530 79	
A. W. Eaton, receiver of public moneys, Oxford, Idaho	6,103 50	
G. B. Folsom, receiver of public moneys, Taylor's Falls, Minn	1,545 67	
M. H. Fitch, receiver of public moneys, Pueblo, Colo	13,816 48	
J. C. Fullerton, receiver of public moneys, Roseburg, Oreg	7,436 95	
W. H. Francis, receiver of public moneys, Bismarck, Dak	50,838 96	
E. G. Gearey, receiver of public moneys, Fargo, Dak	79,611 20	
W. M. Garvey, receiver of public moneys, Cheyenne, Wyo	356 00	
C. H. Gould, receiver of public moneys, Miles City, Mont	7,584 78	
C. F. Gardner, receiver of public moneys, Sacramento, Cal	9,686 63	
H. H. Griffiths, receiver of public moneys, Des Moines, Iowa	1,130 15	
J. T. Hall, receiver of public moneys, Jackson, Miss	14,932 40	
J. W. Haverstick, receiver of public moneys, Los Angeles, Cal	15,171 00	
E. W. Henderson, receiver of public moneys, Central City, Colo	5,365 50	
W. S. Hickox, receiver of public moneys, Durango, Colo	3,478 24	
R. R. Hays, receiver of public moneys, Kirwin, Kans	28,453 18	
B. E. Hutchinson, receiver of public moneys, Aberdeen, Dak	60,045 05	
W. B. Herriott, receiver of public moneys, Redwood Falls, Minn	5,309 23	
W. S. Hurlbut, receiver of public moneys, Cheyenne, Wyo	10,562 10	
A. J. Hoisington, receiver of public moneys, Garden City, Kans	6,947 81	
E. J. Jenkins, receiver of public moneys, Concordia, Kans	4,978 25	
J. H. Jones, receiver of public moneys, Menasha, Wis	1,104 15	
J. Knox, receiver of public moneys, Lake View, Oreg	3,297 32	
M. Krebs, receiver of public moneys, Boise City, Idaho	4,953 00	
C. E. Kelsey, receiver of public moneys, Little Rock, Ark	6,698 82	
A. E. Lemee, receiver of public moneys, Natchitoches, La	11,366 68	
T. Lindsey, receiver of public moneys, Visalia, Cal	9,521 99	
T. J. Leonard, receiver of public moneys, Gunnison, Colo	1,535 50	
R. Lowry, receiver of public moneys, Huron, Dak	110,015 50	
W. B. Lambert, receiver of public moneys, Neligh, Nebr	19,133 24	
J. Lind, receiver of public moneys, Tracy, Minn	4,724 77	
W. B. Nutchell, receiver of public moneys, Saint Cloud, Minn	12,216 91	
P. H. McNulty, receiver of public moneys, Boonville, Mo	4,325 66	
M. Marks, receiver of public moneys, New Orleans, La	19,452 97	
W. H. C. Mitchell, receiver of public moneys, Reed City, Mich	2,506 01	
R. W. Montgomery, receiver of public moneys, Bloomington, Nebr	25,682 64	
R. J. Monroe, receiver of public moneys, Lewiston, Idaho	3,968 84	
A. O. Marsh, receiver of public moneys, Vancouver, Wash	7,806 08	
J. F. Mason, receiver of public moneys, Falls Saint Croix, Wis	2,521 49	
F. J. Osborne, receiver of public moneys, Bodie, Cal	737 50	
O. Perrin, receiver of public moneys, Stockton, Cal	7,455 74	
A. C. Phillips, receiver of public moneys, Harrison, Ark	14,083 93	
C. D. Peck, receiver of public moneys, Lake City, Colo	1,581 00	
H. R. Pease, receiver of public moneys, Watertown, Dak	40,278 28	
S. Parker, receiver of public moneys, Niobrara, Nebr	39,755 46	
W. H. Pilkenton, receiver of public moneys, Wa Keney, Kans	16,322 40	
J. G. Pillsbury, receiver of public moneys, Oregon City, Oreg	10,736 54	
J. Q. A. Peyton, receiver of public moneys, Topeka, Kans	729 93	
J. F. Rollins, receiver of public moneys, Gainesville, Fla	30,280 01	
Carried forward	1,171,146 59	327,209,416 24

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.			
	Brought forward	$8,987,206 03	$30,864,406 79
78	Expenses of fog-signals	48,834 19	
78	Expenses of buoyage	308,401 15	
79	Repairs and preservation of public buildings	149,673 31	
79	Furniture and repairs of same public buildings	328,467 26	
79	Fuel, lights, and water, public buildings	465,701 07	
79	Heating apparatus, public buildings	109,676 56	
80	Pay of assistant custodians and janitors	339,156 48	
80	Marine Hospital Service	465,387 45	
80	Life-Saving Service	768,517 62	
81	Establishing life-saving stations	44,204 54	
81	Rebuilding revenue steamer William Pitt Fessenden	37,969 20	
81	Rebuilding revenue steamer Commodore Perry	44,527 11	
81	Constructing two steam-launches	7,628 61	
81	Compensation in lieu of moieties	30,209 54	
82	Salaries and traveling expenses of agents at seal fisheries in Alaska	13,811 64	
82	Protection of sea-otter hunting-grounds and seal fisheries in Alaska	25,000 00	
82	Custom-house and post-office, Fall River, Mass	30,905 06	
82	Custom-house, Hartford, Conn	8,962 53	
82	Custom-house and post-office, Albany, N. Y	49,739 71	
82	Custom-house and post-office, Buffalo, N. Y	35,494 21	
82	Marine hospital, New Orleans, La	57,282 31	
82	Custom-house, New Orleans, La	23,460 99	
82	Custom-house, Galveston, Tex	20,620 60	
82	Custom-house and post-office, Cincinnati, Ohio	370,675 00	
82	Custom-house and post-office, Cleveland, Ohio	56,728 34	
82	Custom-house and post-office, &c., Toledo, Ohio	67,546 94	
83	Marine hospital, Cincinnati, Ohio	21,337 65	
83	Custom-house, court-house, and post-office, Evansville, Ind	92 60	
83	Custom-house, subtreasury, &c., Chicago, Ill	50 62	
83	Bridewell dock property, Chicago, Ill	825 29	
83	Marine hospital, Memphis, Tenn	32,053 64	
83	Marine hospital, Cairo, Ill	20,767 90	
83	Custom-house and post-office, Memphis, Tenn	60,085 92	
83	Custom-house, post-office, and court-house, Nashville, Tenn	187 71	
83	Custom-house, Saint Louis, Mo	71,943 79	
83	Custom-house, Kansas City, Mo	83,917 70	
83	Appraisers' stores, San Francisco, Cal	356 17	
83	Ram Island light-station, Maine	1,780 53	
83	Danskammer Point fog-bell, New York	5,000 00	
83	Hell Gate electric lights, New York	10,000 00	
83	Fourteen Foot Bank light-station, Delaware Bay	51,431 33	
83	Lazaretto Depot, Maryland	2,442 74	
83	Great Shoals light-station, Maryland	10,482 28	
83	Sandy Point Shoal light-station, Maryland	14,809 40	
83	Patuxent River range-lights, Maryland	9,644 72	
84	Hilton Head and Bay Point light-station, South Carolina	45 60	
84	Lights on the Savannah River, Georgia	13,951 46	
84	Sanibel Island light-station, Florida	34,937 72	
84	Mosquito Inlet light-station, Florida	25,630 47	
84	Cape San Blas light-station, Florida	24,989 88	
84	Dog River Bar and Choctaw Pass Channel, Alabama	500 00	
84	Maumee range-beacons, Ohio	19,000 00	
84	Sandusky Bay light-station, Ohio	12 15	
84	Waugoshance light-station, Michigan	25,000 00	
84	Little Traverse light-station, Michigan	10,000 00	
84	Portage River light-station, Michigan	1,000 00	
84	Pier-head beacon-lights on the lakes, Michigan	1,444 74	
84	Stannard's Rock light-station, Michigan	13,000 00	
84	Detroit River light-station, Michigan	20,000 00	
84	Point Robinson fog-signal, Washington	6,500 00	
84	Lime Point fog-signal, California	9,999 81	
84	Northwest Seal Rock light-station, California	70,000 00	
84	Steam tender for the Atlantic coast	7 50	
84	Survey of light-house sites	2,051 53	
84	Establishment and maintenance of lights and buoys	8,500 00	
84	Lighting and buoyage of Mississippi, Missouri, and Ohio Rivers	162,018 89	
85	Repayment to importers excess of deposits, act August 5, 1882	11,907 43	
85	Repayment to importers excess of deposits, charges and commission cases	177 70	
85	Repayment to importers excess of deposits	5,056,147 30	
88	Debentures, drawbacks, bounties, or allowances	3,650,959 49	
88	Debentures and other charges	54 25	
88	Detection and prevention of frauds upon the customs revenue	66,482 65	
89	Expenses of regulating immigration	235,443 86	
89	Inspection of neat cattle shipped to foreign ports	47,574 70	
89	Unclaimed merchandise	319 89	
89	Refunding moneys erroneously received and covered into the Treasury	37 31	
		22,810,691 77	
	Carried forward		30,864,406 79

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$1,171,146 59	$327,209,416 24
H. D. Root, receiver of public moneys, Lincoln, Nebr	1,812 63	
T. H. Rooney, receiver of public moneys, Walla Walla, Wash	6,487 81	
A. J. Shaw, receiver of public moneys, Lewiston, Idaho	1,900 00	
R. G. Stuart, receiver of public moneys, Olympia, Wash	39,049 02	
H. W. Stone, receiver of public moneys, Benson, Minn	7,517 42	
P. C. Slettin, receiver of public moneys, Crookston, Minn	32,166 33	
W. W. Spalding, receiver of public moneys, Duluth, Minn	5,625 97	
T. J. Sherwood, receiver of public moneys, Marysville, Cal	6,190 06	
C. H. Smith, receiver of public moneys, Washington, Minn	3,851 81	
W. H. Somers, receiver of public moneys, Beatrice, Nebr	555 32	
S. W. Sherfey, receiver of public moneys, Las Cruces, N. Mex	8,167 81	
E. L. Salisbury, receiver of public moneys, Leadville, Colo	4,855 00	
E. G. Swanstrom, receiver of public moneys, Duluth, Minn	462 32	
E. B. Sanders, receiver of public moneys, Wausau, Wis	5,383 33	
W. H. Tancre, receiver of public moneys, Huntsville, Ala	11,239 00	
A. A. Tufts, receiver of public moneys, Camden, Ark	5,825 00	
J. Taffe, receiver of public moneys, North Platte, Nebr	27,784 89	
J. W. Tucker, receiver of public moneys, Valentine, Nebr	57,920 36	
C. N. Thombury, receiver of public moneys, The Dalles, Oreg	20,183 50	
J. Ulrich, receiver of public moneys, La Crosse, Wis	3,080 77	
J. Varnum, receiver of public moneys, Gainesville, Fla	1,013 00	
Z. L. Wise, receiver of public moneys, Dardanelle, Ark	6,896 50	
I. H. Wing, receiver of public moneys, Bayfield, Wis	551 39	
S. C. Wright, receiver of public moneys, Carson, Nev	715 00	
F. G. Ward, receiver of public moneys, Susanville, Cal	2,676 10	
J. M. Wilkinson, receiver of public moneys, Marquette, Mich	4,609 31	
T. Wrong, receiver of public moneys, Concordia, Kans	2,158 87	
H. A. Wilson, receiver of public moneys, Montgomery, Ala	18,714 90	
H. M. Waters, receiver of public moneys, Independence, Kans	4,125 42	
L. G. Wilcox, receiver of public moneys, Detroit, Mich	748 66	
W. C. Willets, receiver of public moneys, Denver, Colo	22,366 80	
J. S. Waters, receiver of public moneys, Farley, Idaho	5,559 50	
A. O. Whipple, receiver of public moneys, Devil's Lake, Dak	17,586 25	
J. L. Wilson, receiver of public moneys, Spokane Falls, Wash	30,594 22	
		1,539,520 86
From marine-hospital fees.		
W. L. Ashmore, collector, Burlington, N. J	525 76	
R. Armstrong, collector, Dubuque, Iowa	1,203 01	
I. S. Adams, collector, Frenchman's Bay, Me	1,206 15	
J. A. P. Allen, collector, New Bedford, Mass	1,142 21	
R. Alverez, deputy collector, Key West, Fla	234 77	
M. R. Barr, collector, Erie, Pa	22 13	
A. J. Beers, collector, New Haven, Conn	3,296 34	
J. Brady, jr., collector, Fall River, Mass	5,245 35	
D. V. Bell, collector, Detroit, Mich	1,104 14	
J. Bookwalter, collector, Minnesota, Minn	1,560 23	
W. A. Baldwin, collector, Newark, N. J	1,113 45	
G. E. Bowden, collector, Norfolk, Va	5,885 42	
A. W. Bash, collector, Puget Sound, Wash	9,065 41	
J. W. Burke, collector, Mobile, Ala	3,804 43	
F. J. Babson, collector, Gloucester, Mass	725 94	
J. D. Bowie, collector, Petersburg, Va	154 14	
A. H. Beach, collector, Wheeling, W. Va	4,845 95	
A. S. Badger, collector, New Orleans, La	17,327 85	
J. R. Brierly, collector, Wilmington, Cal	692 55	
W. F. Brown, collector, Erie, Pa	2 69	
George Bliss, acting collector, Waldoborough, Me	775 83	
J. B. Battelle, Miami, Ohio	969 91	
C. Borner, collector, Galena, Ill	700 95	
E. A. Bragden, collector, York, Me	23 44	
J. M. Boardman, collector, Belfast, Me	555 69	
J. Campbell, collector, Omaha, Nebr	366 76	
J. H. Cozzens, collector, Newport, R. I	759 22	
J. Collins, collector, Bristol, R. I	186 32	
T. F. Cassels, collector, Memphis, Tenn	4,351 31	
B. C. Cook, collector, Richmond, Va	1,272 26	
R. C. Crowell, collector, Kansas City, Mo	222 16	
J. W. Cobbs, collector, Paducah, Ky	436 56	
H. De B. Clay, collector, Yorktown, Va	1,671 39	
D. F. Davis, collector, Bangor, Me	1,525 60	
F. N. Dow, collector, Portland, Me	3,545 23	
J. F. Dravo, collector, Pittsburgh, Pa	5,871 73	
A. C. Davis, collector, Beaufort, N. C	605 18	
W. H. Daniels, collector, Oswegatchie, N. Y	361 37	
S. Dodge, collector, Marblehead, Mass	47 74	
S. H. Doten, collector, Plymouth, Mass	127 66	
M. A. Edgar, collector, Perth Amboy, N. Y	3,995 50	
J. H. Elmer, collector, Bridgeton, N. J	3,146 74	
C. S. English, collector, Georgetown, D. C	615 96	
W. R. Finch, collector, La Crosse, Wis	1,077 28	
H. P. Farrow, collector, Brunswick, Ga	952 90	
J. K. Faulkner, collector, Louisville, Ky	2,141 47	
Carried forward	95,468 08	328,748,937 10

General account of the receipts and expenditures of the United States, &c.--Continued.

BY EXPENDITURES.

Page.				
	Brought forward		$22,810,691 77	$30,864,406 79
	Deduct repayments:			
81	Life-Saving Service, contingent expenses	$1 50		
81	Rebuilding and improving life-saving stations	752 47		
81	Building or purchase of such vessels as may be required for the revenue service	11,219 81		
82	Distribution of standard weights and measures for use of colleges	65		
82	Barge-office building, New York	373 07		
83	Staten Island depot, New York	4 43		
83	Barnegat light-station, New Jersey	103 09		
83	Absecom light-station, New Jersey	1,728 55		
83	Horseshoe Shoal range-lights, New Jersey	77 63		
83	Cohansey light-station, New Jersey	363 79		
83	Kent Point light-station, Maryland	42 22		
83	Portsmouth Depot, Virginia	1,000 00		
84	Bell's Rock light-station, Virginia	5 35		
84	Paris Island light-station, South Carolina	118 34		
84	Repairs of iron light-houses, Florida	398 04		
84	Florida Reef beacon, Florida	239 42		
85	Completing the lighting and buoyage of Ohio River	3,194 07		
85	Repayment to importers excess of deposits, act March 3, 1881	4,783 26		
			24,405 69	
	Total expenses of customs			22,786,286 08
	Interior civil.			
89	Salaries, office of Secretary		159,201 66	
89	Contingent expenses, Department of Interior		87,711 82	
89	Publishing the Bienniel Register		2,499 80	
89	Rent of buildings, Department of Interior		48,753 32	
89	Library, Department of Interior		500 00	
89	Stationery, Department of Interior		61,934 64	
90	Postage, Department of Interior		28,138 85	
90	Postage to Postal Union countries		5,259 24	
90	Salaries, General Land Office		410,097 70	
90	Expenses of inspectors, General Land Office		7,866 31	
91	Library, General Land Office		1,000 00	
90	Maps of the United States, General Land Office		6,000 00	
91	Reproducing plats of surveys, General Land Office		25,998 00	
91	General expenses, Civil Service Commission		5,240 33	
91	Publishing proclamations relating to sale of lands		604 12	
91	Salaries, office Commissioner of Indian Affairs		88,603 49	
91	Salaries, temporary clerks, office Commissioner of Indian Affairs		7,399 55	
91	Salaries, office Commissioner of Railroads		14,570 39	
91	Traveling expenses, office Commissioner of Railroads		2,577 70	
91	Salaries, office Bureau of Education		44,244 14	
91	Contingent expenses, office Bureau of Education		780 00	
91	Collecting statistics, office Bureau of Education		1,600 00	
91	Distributing documents, office Bureau of Education		2,052 77	
91	Library, office Bureau of Education		1,675 00	
91	Salaries, office Commissioner of Pensions		1,936,161 65	
92	Investigation of pension cases, office Commissioner of Pensions		333,527 00	
92	Salaries, office Commissioner of Patents		532,505 27	
92	Scientific library, office Commissioner of Patents		5,000 00	
92	Plates for Patent Office Official Gazette		34,999 40	
92	Photolithographing, office Commissioner of Patents		66,999 92	
92	Illustrations for Patent office Report for 1870		189 25	
92	Salaries, office of Architect of the Capitol		18,237 87	
92	Salaries, office of Geological Survey		34,873 82	
92	Salaries, office of surveyor-general of Arizona		4,805 50	
92	Contingent expenses, office surveyor-general of Arizona		1,497 81	
92	Salaries, office surveyor-general of California		34,987 91	
02	Contingent expenses, office surveyor-general of California		2,934 89	
92	Salaries, office surveyor-general of Colorado		8,999 48	
92	Contingent expenses, office surveyor-general of Colorado		1,500 00	
92	Salaries, office surveyor-general of Dakota		11,398 68	
92	Contingent expenses, office surveyor-general of Dakota		2,000 00	
92	Salaries, office surveyor-general of Florida		4,799 75	
93	Contingent expenses, office surveyor-general of Florida		999 88	
93	Salaries, office surveyor-general of Idaho		5,000 00	
93	Contingent expenses, office surveyor-general of Idaho		1,500 00	
93	Salaries, office surveyor-general of Louisiana		15,905 37	
93	Contingent expenses, office surveyor-general of Louisiana		1,000 00	
93	Salaries, office surveyor-general of Minnesota		9,901 54	
93	Contingent expenses, office surveyor-general of Minnesota		916 33	
93	Salaries, office surveyor-general of Montana		10,498 61	
93	Contingent expenses, office surveyor-general of Montana		2,000 00	
93	Salaries, office surveyor-general of Nebraska and Iowa		5,982 38	
	Carried forward		4,103,481 14	53,650,692 87

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$95,468 08	$328,748,937 10
B. Flagler, collector, Niagara, N. Y	186 18	
G. Fisher, collector, Cairo, Ill	1,081 00	
G. Frazee, collector, Burlington, N. J	1,153 85	
C. A. Gould, collector, Buffalo, N. Y	4,604 97	
J. L. Gaston, collector, Chattanooga, Tenn	662 90	
J. H. Gray, collector, Alexandria, Va	948 30	
J. Gilchrist, collector, Wheeling, W. Va	339 49	
F. B. Goss, collector, Barnstable, Mass	1,717 29	
A. A. Gardner, collector, Nantucket, Mass	177 63	
A. W. Hall, collector, Milwaukee, Wis	5,654 09	
J. S. Hanover, collector, Fairfield, Conn	1,720 36	
C. H. Houghton, collector, Perth Amboy, N. J	569 12	
W. H. Huse, collector, Newburyport, Mass	370 40	
W. Hartsuff, collector, Huron, Mich	5,782 23	
A. F. Howard, collector, Portsmouth, N. H	594 16	
G. W. Howe, collector, Cuyahoga, Ohio	3,678 69	
C. Harris, collector, Providence, R. I	2,472 51	
E. Higgins, collector, St. John's, Fla	2,402 97	
J. W. Howell, collector, Fernandina, Fla	346 68	
W. P. Hiller, collector, Nantucket, Mass	15 60	
J. Hirst, collector, St. Mark's, Fla	672 17	
G. Holmes, collector, Beaufort, S. C	537 15	
J. F. Hartranft, collector, Philadelphia, Pa	18,480 56	
J. D. Hopkins, collector, Frenchman's Bay, Me	1,243 81	
J. M. Haycock, collector, Passamaquoddy, Me	537 90	
T. A. Henry, collector, Pamlico, N. C	1,501 44	
T. S. Hodson, collector, Eastern Maryland	2 92	
G. W. Henderson, collector, Pearl River, Miss	2,081 05	
J. L. Haynes, collector, Brazos, Tex	278 05	
J. Hunter, collector, St. Joseph, Mo	110 33	
H. F. Heriot, collector, Georgetown, S. C	483 65	
T. Ireland, collector, Annapolis, Md	896 80	
T. F. Johnson, collector, Savannah, Ga	3,549 04	
J. C. Jewell, collector, Evansville, Ind	2,887 33	
T. B. Johnston, collector, Charleston, S. C	3,335 84	
J. R. Jolley, collector, Teche, La	1,450 92	
G. A. Johnson, collector, San Diego, Cal	111 54	
J. M. Kercheval, collector, Nashville, Tenn	1,949 12	
H. A. Kennedy, collector, Waldoborough, Me	1,730 61	
I. Lord, collector, Saco, Me	136 25	
W. Lower, collector, Sag Harbor, N. Y	631 12	
J. J. Lamoree, collector, Oswego, N. Y	922 64	
J. A. Luby, collector, Albany, N. Y	4,657 36	
H. Lawson, collector, Eastern Maryland	6,915 97	
D. E. Lyon, collector, Dubuque, Iowa	50 00	
W. Livingston, jr., collector, Detroit, Mich	5,565 63	
J. B. Mitchell, collector, Yorktown, Va	4 65	
C. E. Morris, collector, Genesee, N. Y	106 09	
D. M. McLaughlin, collector, Michigan, Mich	4,513 43	
J. D. Merryman, collector, Oregon, Oreg	1,423 33	
A. G. Malloy, collector, Galveston, Tex	2,942 67	
E. T. Moore, collector, Patchogue, N. Y	690 15	
G. W. Mathias, collector, Little Egg Harbor, N. J	611 09	
W. C. Marshall, collector, Belfast, Me	707 33	
W. G. Morris, collector, Alaska, Alaska	214 53	
D. W. McClung, collector, Cincinnati, Ohio	9,794 60	
S. Moffett, collector, Champlain, N. Y	243 06	
C. B. Marchant, collector, Edgartown, Mass	478 79	
A. Newburger, collector, Natchez, Miss	193 19	
N. B. Nutt, collector, Passamaquoddy, Me	1,857 78	
C. Y. Osborn, collector, Superior, Mich	1,259 22	
C. H. Odell, collector, Salem, Mass	152 17	
F. A. Osgood, collector, Marblehead, Mass	122 22	
A. Putnam, collector, Middletown, Conn	1,619 78	
E. J. Pennypacker, collector, Wilmington, N. C	1,577 75	
J. L. Pierce, collector, Machias, Me	1,010 94	
N. Plato, collector, Corpus Christi, Tex	431 80	
W. H. Pratt, collector, Humboldt, Cal	906 07	
C. Rude, collector, Sandusky, Ohio	1,235 60	
C. E. Robinson, collector, Albemarle, N. C	839 94	
W. H. Robertson, collector, New York, N. Y	70,088 68	
S. H. Ritch, collector, Port Jefferson, N. Y	629 26	
W. T. Simpson, collector, Genesee, N. Y	30 13	
F. N. Shurtliff, collector, Willamette, Oreg	3,697 66	
W. H. Sargent, collector, Castine, Me	970 26	
J. P. Sanborn, collector, Huron, Mich	2 13	
W. J. Smith, collector, Memphis, Tenn	165 00	
G. B. Sawyer, collector, Wiscasset, Me	543 11	
J. Spalding, collector, Chicago, Ill	6,986 36	
N. Smith, collector, Duluth, Minn	241 02	
S. M. Sawyer, collector, Apalachicola, Fla	591 41	
Carried forward	307,542 90	328,748,937 10

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.			
	Brought forward	$4,103,481 14	$53,650,692 87
93	Contingent expenses, office surveyor-general of Nebraska and Iowa	1,500 00	
93	Salaries, office surveyor-general of Nevada	5,491 37	
93	Contingent expenses, office surveyor-general of Nevada	1,500 00	
93	Salaries, office surveyor-general of New Mexico	8,500 00	
93	Contingent expenses, office surveyor-general of New Mexico	1,500 00	
93	Salaries, office surveyor-general of Oregon	7,000 00	
93	Contingent expenses, office surveyor-general of Oregon	1,244 65	
93	Salaries, office surveyor-general of Utah	5,500 00	
93	Contingent expenses, office surveyor-general of Utah	1,467 77	
93	Salaries, office surveyor-general of Wyoming	5,996 76	
93	Contingent expenses, office surveyor-general of Wyoming	1,500 00	
94	Salaries, office surveyor-general of Washington	8,000 00	
94	Contingent expenses, office surveyor-general of Washington	1,500 00	
94	Annual repairs of the Capitol	54,331 57	
94	Improving the Capitol grounds	64,999 31	
94	Lighting the Capitol and grounds	27,999 99	
94	Senate stable and engine-house	97 56	
94	Fire-proof building for the Pension Office	186,496 34	
94	Reconstructing Interior Department Building	56,000 00	
94	Repair of building, Department of Interior	6,560 00	
94	Buildings and grounds, Howard University	3,500 00	
94	Buildings and grounds, Government Hospital for the Insane	30,481 72	
94	Buildings and grounds, Columbia Institution for the Deaf and Dumb	3,000 00	
94	Penitentiary building, Territory of Dakota	8,485 82	
94	Extension of Government Printing Office	550 95	
94	Elevators and steam machinery, United States Senate	494 67	
94	Current expenses, Government Hospital for the Insane	227,499 30	
94	Current expenses, Columbia Institution for the Deaf and Dumb	55,000 00	
94	Support of Freedmen's Hospital and Asylum	46,671 63	
94	Howard University	15,000 00	
94	Additional accommodations, Government Hospital for the Insane	46,000 00	
94	Fire apparatus, Government Printing Office and Hospital for the Insane	685 09	
94	Maryland Institution for Instruction of the Blind	6,791 33	
94	Preservation of collections, National Museum	102,112 82	
95	Preservation of collections, National Museum, Armory Building	2,500 00	
95	Furniture and fixtures, National Museum	58,000 00	
95	Heating apparatus, building for the Pension Office	2,500 00	
95	Repairs of adobe palace, New Mexico	600 00	
95	Expenses of the Tenth Census	130,117 25	
95	Protection and improvement of Yellowstone National Park	40,000 00	
95	Expenses of the Tenth Census, printing and engraving	3,676 55	
95	Settlement of claims for swamp lands and swamp-land indemnity	14,736 20	
95	Protection and improvement of Hot Springs, Ark	57,960 84	
95	Improvement of Hot Springs Reservation, Arkansas	31,529 60	
95	Surveying the public lands	524,543 42	
97	Surveying private land claims in Arizona	6,903 02	
97	Surveying private land claims in California	4,534 99	
97	Surveying private land claims in New Mexico	7,762 04	
97	Geological Survey	306,585 13	
97	Surveying boundary line, Crow Indian lands	4,800 00	
97	Surveying agricultural land, Crow Indian Reservation	14,723 70	
97	Deposits by individuals for surveying the public lands	1,116,331 92	
99	Repayment for lands erroneously sold	32,699 64	
103	Salaries and commissions of registers and receivers	494,948 93	
105	Expenses of depositing public moneys	14,097 59	
106	Contingent expenses of land offices	141,075 71	
107	Depredations on public timber	85,229 98	
108	Protecting public lands	87,278 45	
109	Indemnity of swamp lands purchased by individuals	34,252 33	
109	Payment to William Brindle	18,838 81	
109	Sale of Fort Larned military reservation, Kansas	942 00	
109	Relief of F. G. Schwatka and wife	6,000 00	
109	Relief of M P. Jones	24,597 75	
109	Relief of William L. White	1,333 33	
109	Relief of Ellen Call Long and Mary K. Brevard	8,563 37	
110	Five per cent. fund of net proceeds of sales of public lands in Arkansas	3,365 85	
110	Five per cent. fund of net proceeds of sales of public lands in Michigan	26,115 40	
110	Five per cent. fund of net proceeds of sales of public lands in Minnesota	31,507 06	
110	Five per cent. fund of net proceeds of sales of public lands in Oregon	5,277 21	
110	Five per cent. fund of net proceeds of sales of public lands in Nebraska	29,242 62	
110	Five per cent. fund of net proceeds of sales of public lands in Wisconsin	25,748 16	
	Carried forward	8,495,858 64	53,650,692 87

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$307,542 90	$328,748,937 10
J. W. Short, collector, Vicksburg, Miss	2,514 30	
E. L. Sullivan, collector, San Francisco, Cal	29,118 84	
H. C. Stafford, collector, Eria, Pa	1,555 93	
J. W. Sargent, collector, Kennebunk, Me	50 00	
J. Shepard, collector, Saint Mary's, Ga	126 73	
W. H. Sears, collector, San Francisco, Cal	3,144 47	
J. A. Tibbits, collector, New London, Conn	2,443 71	
L. Thompson, collector, Delaware, Del	2,579 24	
H. N. Trumbull, collector, Stonington, Conn	904 45	
J. M. Tarble, collector, Pensacola, Fla	2,191 15	
G. Toy, collector, Cherrystone, Va	2,107 87	
B. Upton, jr., collector, Tappahannock, Va	1,019 65	
C. Van Clive, collector, Yaquina, Oreg	23 65	
F. A. Vaughan, collector, Saluria, Tex	228 62	
J. H. Wilson, collector, Georgetown, D. C	2,267 03	
A. Woolf, collector, Nashville, Tenn	20 00	
F. N. Wicker, collector, Key West, Fla.	2,707 08	
G. H. Warren, collector, Cape Vincent, N. Y	476 04	
R. Worthington, collector, Boston, Mass	16,001 95	
J. W. Wakefield, collector, Bath, Me	2,243 85	
E. H. Webster, collector, Baltimore, Md	24,868 30	
C. M. Whitney, collector, Saint Louis, Mo	10,812 98	
C. B. Watson, collector, Southern Oregon	255 00	
W. Wells, collector, Vermont, Vt	295 81	
F. E. Witzell, co lector, Saint Augustine, Fla	24 20	
		415,523 75

Labor, drayage, and storage.

J. Bookwalter, collector, Minnesota, Minn	133 15	
J. W. Burke, collector, Mobile, Ala	406 47	
A. S. Badger, collector, New Orleans, La	759 28	
D. V. Bell, collector, Detroit, Mich	900 00	
J. B. Battelle, collector, Miami, Ohio	2 75	
F. N. Dow, collector, Portland, Me	3,542 67	
W. H. Daniels, collector, Oswegatchie, N. Y	74 00	
A. C. Davis, collector, Beauford, N. C	778 94	
J. F. Dravo, collector, Pittsburgh, Pa	822 30	
J. F. Faulkner, collector, Louisville, Ky	139 72	
C. A. Gould, collector, Buffalo, N. Y	206 25	
G. W. Howe, collector, Cuyahoga, Ohio	179 00	
C. Harris, collector, Providence, R. I	567 03	
J. F. Hartranft, collector, Philadelphia, Pa	6,561 83	
J. L. Haynes, collector, Brazos, Tex	581 70	
T. F. Johnson, collector, Savannah, Ga	37 33	
T. B. Johnston, collector, Charleston, S. C	954 18	
J. J. Lamoree, collector, Oswego, N. Y	3,291 00	
W. Livingstone, jr., collector, Detroit, Mich	1,388 58	
D. W. M'Clung, collector, Cincinnati, Ohio	2,053 75	
A. G. Malloy, collector, Galveston, Tex	2,438 69	
C. H. Odell, collector, Salem, Mass	203 31	
N. Plato, collector, Corpus Christi, Tex	233 37	
E. J. Pennypacker, collector, Wilmington, N. C	323 14	
A. Putnam, collector, Middletown, Conn	100 00	
W. H. Robertson, collector, New York, N. Y	24,495 29	
V. Smith, collector, Duluth, N. Y	63 00	
E. L. Sullivan, collector, San Francisco, Cal	1,095 05	
W. H. Sears, collector, San Francisco, Cal	167 60	
L. Thompson, collector, Delaware, Del	22 40	
J. H. Wilson, collector, Georgetown, D. C	62 75	
E. H. Webster, collector, Baltimore, Md	3,718 98	
R. Worthington, collector, Boston, Mass	16,135 44	
J. W. Wakefield, collector, Bath, Me	190 50	
C. M. Whitney, collector, Saint Louis Mo	720 00	
		73,349 45

Services of officers.

R. Alverez, deputy collector, Key West, Fla	244 00	
J. R. Brierly, colector, Wilmington, Cal	285 00	
A. S. Badger, collector, New Orleans, La	7,530 14	
F. J. Babson collector, Gloucester, Mass	876 00	
D. V. Bell, collector, Detroit, Mich	1,119 26	
J. M. Boardman, collector, Belfast, Me	33 30	
J. Bookwalter, collector, Minnesota, Minn	7,705 50	
A. J. Beers, collector, New London, Conn	483 93	
G. E. Bowden, collector, Norfolk, Va	216 00	
J. W. Burke, collector, Mobile, Ala	193 10	
H. De B. Clay, collector, Yorktown, Va	2,409 00	
W. H. Daniels, collector, Oswegatchie, N. Y	1,278 28	
A. C. Davis, collector, Beaufort, N. C	89 30	
F. N. Dow, collector, Portland, Me	2,698 50	
Carried forward	25,161 31	329,237,810 30

General account of the receipts aud expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.				
	Brought forward		$8,495,858 64	$53,650,692 87
110	Five per cent. fund of net proceeds of sales of public lands in Kansas		26,636 22	
110	Five per cent. fund of net proceeds of sales of public lands in Florida		11,231 28	
110	Five per cent. fund of net proceeds of sales of public lands in Louisiana		22,773 51	
110	Five per cent. fund of net proceeds of sales of agricultural lands in Colorado		4,952 51	
110	Two per cent. fund of net proceeds of sales of public lands in Mississippi		21,107 41	
110	Two per cent. fund of net proceeds of sales of public lands in Missouri		3,067 55	
110	Two per cent. fund of net proceeds of sales of public lands in Alabama		5,876 14	
110	Three per cent. fund of net proceeds of sales of public lands in Mississippi		14,071 61	
110	Three per cent. fund of net proceeds of sales of public lands in Missouri		4,601 32	
110	Three per cent. fund of net proceeds of sales of public lands in Alabama		3,917 43	
			8,614,093 62	
	Deduct repayments:			
90	Contingent expenses, General Land Office	$118 81		
91	Packing Congressional documents	87		
92	Contingent expenses, office Commissioner of Pensions	4 58		
92	Contingent expenses, office Commissioner of Patents	3 81		
92	Contingent expenses, office Commissioner of Railroads	3 77		
92	Copies of drawings, office Commissioner of Patents	27		
94	Expenses of taking the census of the Territory of Minnesota	1,000 00		
94	Enlarging court-house, Washington, D. C	10		
			1,132 21	
	Total expenses Interior civil			8,612,961 41
	Internal revenue.			
116	Rate of taxes on tobacco		3,535,049 42	
110	Salaries and expenses of agents and subordinate officers internal revenue		2,367,021 81	
116	Redemption of stamps		294,601 54	
113	Salaries and expenses of collectors internal revenue		1,849,864 06	
116	Repayment of taxes on distilled spirits destroyed by casualty		627 30	
116	Refunding taxes illegally collected		33,424 50	
117	Refunding moneys erroneously received and covered into the Treasury		112 03	
117	Refunding taxes to certain citizens of Tennessee		449 99	
117	Alteration of dies, plates, and stamps		9,806 08	
117	Stamps, paper, and dies		454,576 49	
119	Relief of B. F. Lonergan		615 61	
119	Relief of Ernest F. Umland		796 71	
119	Relief of Columbus F. Perry and Elizabeth H. Gilmer		3,000 00	
119	Relief of E. S. Montell, executor		835 20	
119	Relief of Charles Kortzenborn		125 00	
118	Punishment for violation of internal-revenue laws		54,624 64	
118	Allowance or drawback		51,249 04	
	Total expenses internal revenue			8,656,779 42
	Public debt.			
	Redemption of—			
119	Gold certificates, act of March 3, 1863		888,840 00	
119	Gold certificates, act of July 12, 1882		24,567,140 00	
120	Silver certificates		20,005,140 00	
120	Certificates of deposit, act June 8, 1872		27,845,000 00	
120	Refunding certificates, act February 26, 1879		65,900 00	
120	Seven-thirties of 1861		400 00	
120	Old demand notes		545 00	
120	Legal-tender notes		85,948,236 00	
120	Fractional currency		20,629 50	
120	One-year notes of 1863		1,200 00	
120	Two-year notes of 1863		800 00	
120	Compound-interest notes		5,960 00	
120	Seven-thirties of 1864 and 1865		3,350 00	
120	Loan of 1858		5,000 00	
120	Loan of February, 1861 (1881s)		55,000 00	
120	Oregon war debt		650 00	
120	Loan of July and August, 1861 (1881s)		202,650 00	
120	Loan of July and August, 1861 (1881s), continued at 3½ per cent		566,250 00	
120	Five-twenties of 1862		4,350 00	
120	Loan of 1863 (1881s)		28,700 00	
	Carried forward		160,215,740 50	70,920,433 70

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$25,161 31	$329,237,810 30
M. A. Edgar, collector, Perth Amboy, N. J	956 00	
B. Flagler, collector, Niagara, N. Y	5,533 36	
F. B. Goss, collector, Barnstable, Mass	408 33	
C. A. Gould, collector, Buffalo, N. Y	4,048 88	
J. H. Gray, collector, Alexandria, Va	3 00	
A. A. Gardner, collector, Nantucket, Mass	69 00	
J. F Hartranft, collector, Philadelphia, Pa	11,916 86	
W. Hartsuff, collector, Huron, Mich	4,445 05	
J. D. Hopkins, collector, Frenchman's Bay, Me	494 00	
C. Harris, collector, Providence, R. I	730 00	
J. L. Haynes, collector, Brazos, Tex	38 50	
G. A. Johnson, collector, San Diego, Cal	216 00	
T. F. Johnson, collector, Savannah, Ga	267 00	
T. B. Johnston, collector, Charleston, S. C	6 00	
P. P. Kidder, collector, Dunkirk, N. Y	1,098 00	
W. Livingstone, jr., collector, Detroit, Mich	948 25	
S. Moffett, collector, Champlain, N. Y	96 00	
A. G. Malloy, collector, Galveston, Tex	762 08	
W. C. Marshall, collector, Belfast, Me	74 24	
J. D. Merriman, collector, Oregon, Oreg	52 00	
C. H. Odell, collector, Salem, Mass	9 00	
W. H. Pratt, collector, Humboldt, Cal	18 00	
N. Plato, collector, Corpus Christi, Tex	3,298 22	
E. J. Pennypacker, collector, Wilmington, N. C	439 00	
W. H. Robertson, collector, New York, N. Y	128,405 00	
E. L. Sullivan, collector, San Francisco, Cal	17,889 51	
G. B Sawyer, collector, Wiscasset, Me	72 02	
V. Smith, collector, Duluth, Minn	93 88	
W. H. Sears, collector, San Francisco, Cal	2,844 21	
J. Spalding, collector, Chicago, Ill	4,418 42	
H. C. Stafford, collector, Erie, Pa	9 50	
J. A. Tibbetts, collector, New London, Conn	43 75	
L. Thompson, collector, Delaware, Del	5 00	
F. A. Vaughan, collector, Saluria, Tex	52 00	
F. N. Wicker, collector, Key West, Fla	1,220 00	
E. H. Webster, collector, Baltimore, Md,	15,056 05	
R. Worthington, collector, Boston, Mass	37,334 13	
W. Wells, collector, Vermont, Vt	4,936 80	
		273,468 35

From weighing fees.

A. S. Badger, collector, New Orleans, La	354 20	
J. W. Burke, collector, Mobile, Ala	15 75	
F. J. Babson, collector, Gloucester, Mass	103 53	
H. DeB. Clay, collector, Yorktown, Va	3,592 30	
R. C. Crowell, collector, Kansas City, Mo	5 05	
A. C. Davis, collector, Beaufort, N. C	2,027 14	
F. N. Dow, collector, Portland, Me	310 05	
J. F. Dravo, collector, Pittsburgh, Pa	36 14	
C. A. Gould, collector, Buffalo, N. Y	2 11	
J. L. Haynes, collector, Brazos, Tex	20 50	
J. F. Hartranft, collector, Philadelphia, Pa	1,646 89	
C. Harris, collector, Providence, R. I	6 10	
T. B. Johnston, collector, Charleston, S. C	64 25	
A. G. Malloy, collector, Galveston, Tex	68 50	
S. Moffett, collector, Champlain, N. Y	79	
N. Plato, collector, Corpus Christi, Tex	272 78	
E. J. Pennypacker, collector, Wilmington, N. C	17 80	
W. H. Robertson, collector, New York, N. Y	50,869 33	
E. L. Sullivan, late collector, San Francisco, Cal	7,198 19	
W. H. Sears, collector, San Francisco, Cal	993 40	
J. Spalding, collector, Chicago, Ill	6 56	
L. Thompson, collector, Delaware, Del	90 09	
F. A. Vaughan, collector, Saluria, Tex	12 39	
E. H. Webster, collector, Baltimore, Md	1,245 09	
R. Worthington, collector, Boston, Mass	6,572 15	
		75,531 37

From customs officers' fees.

A. S. Badger, collector, New Orleans, La	12,369 56	
J. R. Brierly, collector, Wilmington, Cal	140 00	
F. N. Dow, collector, Portland, Me	11,155 50	
W. R. Finch, collector, La Crosse, Wis	108 55	
J. F. Hartranft, collector, Philadelphia, Pa	21,928 98	
W. F. Pratt, collector, Humboldt, Cal	377 30	
W. H. Robertson, collector, New York, N. Y	198,288 42	
J. Spalding, collector, Chicago, Ill	22,359 40	
E. L. Sullivan, collector, San Francisco, Cal	20,135 15	
W. H. Sears, collector, San Francisco, Cal	2,413 65	
Carried forward	289,276 51	329,586,810 02

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.			
	Brought forward	$160,215,740 50	$70,920,433 70
	Redemption of—		
120	Loan of 1863 (1881s) continued at 3½ per cent	422,550 00	
120	Ten-forties of 1864	72,300 00	
120	Five-twenties of June, 1864	1,000 00	
120	Five-twenties of 1865	1,200 00	
120	Consols of 1865	65,400 00	
120	Consols of 1867	178,850 00	
120	Consols of 1868	21,700 00	
120	Funded loan of 1881	176,650 00	
120	Funded loan of 1881 continued at 3½ per cent	34,550,700 00	
120	Loan of 1882 (three per cents), act July 12, 1882	64,814,600 00	
	Total redemptions	260,520,690 50	
	Interest on—		
120	Refunding certificates, act February 26, 1879	12,250 21	
120	Navy pension fund	630,000 00	
120	Seven-thirties of 1861	72 06	
120	One-year notes of 1863	60 00	
120	Two-year notes of 1863	77 92	
120	Compound-interest notes	1,156 24	
120	Seven-thirties of 1864 and 1865	545 15	
120	Loan of 1858	2,750 00	
120	Loan of February, 1861(1881s)	1,860 00	
120	Loan of July and August, 1861 (1881s)	15,616 50	
120	Loan of July and August, 1861 (1881s), continued at 3½ per cent	8,372 73	
120	Five-twenties of 1862	796 25	
120	Loan of 1863 (1881s)	4,659 00	
120	Loan of 1863 (1881s) continued at 3½ per cent	3,394 41	
120	Ten-forties of 1864	6,808 47	
120	Five-twenties of June, 1864	6 97	
120	Five-twenties of 1865	2,893 94	
121	Consols of 1865	12,600 86	
121	Consols of 1867	22,494 63	
121	Consols of 1868	579 20	
121	Central Pacific stock	1,552,327 20	
121	Kansas Pacific stock (U. P. E. D.)	378,150 00	
121	Union Pacific stock	1,631,490 72	
121	Central Branch Union Pacific stock (A. & P. P.)	95,640 00	
121	Western Pacific stock	118,233 60	
121	Sioux City and Pacific stock	97,639 20	
121	Funded loan of 1881	9,444 10	
121	Funded loan of 1881 continued at 3½ per cent	570,149 27	
121	Funded loan of 1891	11,196,269 73	
121	Funded loan of 1907	29,518,375 31	
121	Loan of 1882 (three per cents), act July 12, 1882	8,683,961 81	
		54,578,675 48	
	Deduct excess repayment:		
120	Oregon war debt	297 00	
	Total interest	54,578,378 48	
	Total redemptions and interest		315,099,068 98
	Interior—Indians.		
121	Pay of Indian agents	85,026 63	
122	Pay of Indian police	64,031 75	
123	Pay of interpreters	19,504 16	
124	Pay of Indian inspectors	13,997 30	
124	Traveling expenses of Indian inspectors	5,129 58	
124	Pay of Indian school superintendent	3,000 00	
124	Traveling expenses of Indian school superintendent	1,408 50	
124	Traveling expenses of Indian school inspector	27 62	
124	Buildings at agencies and repairs	21,181 00	
125	Contingencies, Indian Department	41,125 65	
126	Expenses, Indian commissioners	1,586 85	
126	Telegraphing and purchase of Indian supplies	31,020 37	
128	Transportation of Indian supplies	253,908 78	
129	Vaccination of Indians	236 00	
	Fulfilling treaties with—		
129	Apaches, Kiowas, and Comanches	34,623 78	
129	Cheyennes and Arapahoes	32,575 00	
129	Chickasaws	3,000 00	
129	Chippewas, Bois Fort band	12,437 84	
129	Chippewas of the Mississippi	21,000 00	
129	Chippewas, Pillagers, and Lake Winnebagoshish bands	19,005 65	
130	Choctaws	37,532 89	
130	Choctaws and Chickasaws	6,589 10	
130	Confederated tribes and bands in Middle Oregon	100 00	
	Carried forward	708,048 45	386,019,502 68

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward		$329,586,810 02
A. Tibbets, collector, Paso del Norte, N. Mex	$177 90	
E. H. Webster, collector, Baltimore, Md	14,748 35	
R. Worthington, collector, Boston, Mass	40,433 01	
		344,635 77
From fines, penalties, and forfeitures—customs.		
R. Alverez, deputy collector, Key West, Fla	782 51	
I. S. Adams, collector, Frenchman's Bay, Me	10 00	
J. Bookwalter, collector, Minnesota, Minn	574 25	
A. W. Bash, collector, Puget Sound, Wash	1,033 61	
A. A. Burleigh, collector, Aroostook, Me	2,654 19	
A. H. Beach, collector, Wheeling, W. Va	40 00	
J. W. Burke, collector, Mobile, Ala	687 02	
A. S. Badger, collector, New Orleans, La	614 26	
J. B. Battelle, collector, Miami, Ohio	35 00	
J. R. Brierly, collector, Wilmington, Cal	3 50	
D. V. Bell, collector, Detroit, Mich	445 18	
J. D. Bowie, collector, Petersburg, Va	10 00	
G. E. Bowden, collector, Norfolk, Va	16 34	
C. Borner, collector, Galena, Ill	11 70	
F. J. Babson, collector, Gloucester, Mass	55 19	
T.F. Cassels, collector, Memphis, Tenn	223 92	
B. C. Cook, collector, Richmond, Va	10 00	
H. DeB. Clay, collector, Yorktown, Va	55 00	
J. Campbell, collector, Omaha, Nebr	8 25	
D. F. Davis, collector, Bangor, Me	707 50	
W. H. Daniels, collector, Oswegatchie, N. Y	822 13	
F. N. Dow, collector, Portland, Me	1,626 57	
M. A. Edgar, collector, Perth Amboy, N. J	110 00	
B. Flagler, collector, Niagara, N. Y	2,063 38	
H. P. Farrow, collector, Brunswick, Ga	41 00	
J. K. Faulkner, collector, Louisville, Ky	14 00	
W. R. Finch, collector, La Crosse, Wis	76 00	
C. A. Gould, collector, Buffalo, N. Y	213 25	
J. L. Gaston, collector, Chattanooga, Tenn	104 45	
F. B. Goss, collector, Barnstable, Mass	50 00	
W. Hartsuff, collector, Huron, Mich	448 35	
G. W. Howe, collector, Cuyahoga, Ohio	988 00	
J. L. Haynes, collector, Brazos, Tex	1,220 51	
J. F. Hartranft, collector, Philadelphia, Pa	137 45	
W. G. Henderson, collector, Pearl River, Miss	81 00	
A. F. Howard, collector, Portsmouth, N. H	531 37	
H. F. Heriott, collector, Georgetown, S. C	25 00	
A. W. Hall, collector, Milwaukee, Wis	28 00	
J. S. Hanover, collector, Fairfield, Conn	3 50	
J. Hunter, collector, Saint Joseph, Mo	50 00	
T. A. Henry, collector, Pamlico, N, C	10 00	
E. Higgins, collector, Saint John's, Fla	70 00	
J. Hirst, collector, Saint Mark's, Fla	411 69	
T. Ireland, collector, Annapolis, Md	200 00	
T. B. Johnston, collector, Charleston, S. C	273 60	
T. F. Johnson, collector, Savannah, Ga	170 00	
H. A. Kennedy, collector, Waldoborough, Me	5 00	
J. J. Lamoree, collector, Oswego, N. Y	63 10	
J. R. Leonard, collector, Indianapolis, Ind	1 25	
W. Livingston, jr., collector, Detroit, Mich	153 45	
J. A. Luby, collector, Albany, N. Y	100 00	
A. G. Malloy, collector, Galveston, Tex	372 85	
C. E. Morris, collector, Genesee, N. Y	146 22	
S. Moffett, collector, Champlain, N. Y	755 82	
D. W. McClung, collector, Cincinnati, Ohio	48 00	
W. G. Morris, collector, Alaska, Alaska	72 08	
J. D. Merryman, collector, Oregon, Oreg	105 21	
G. W. Mathias, collector, Little Egg Harbor, N. J	10 00	
D. McLaughlin, collector, Michigan, Mich	785 13	
W. B. Nutt, collector, Passamaquoddy, Me	140 00	
C. Y. Osburn, collector, Superior, Mich	15 00	
N. Plato, collector, Corpus Christi, Tex	1,822 64	
W. A. Pledger, collector, Atlanta, Ga	9 90	
J. L. Pierce, collector, Machias, Me	241 49	
W. H. Robertson, collector, New York, N. Y	33,004 39	
C. E. Robinson, collector, Albemarle, N. C	10 00	
C. Rude, collector, Sandusky, Ohio	10 00	
S. M. Sawyer, collector, Apalachicola, Fla	10 00	
J. Spalding, collector, Chicago, Ill	1,683,88	
E. L. Sullivan, collector, San Francisco, Cal	15,463 01	
H. C. Stafford, collector, Erie, Pa	5 00	
J. W. Short, collector, Vicksburg, Miss	71 30	
W. H. Sears, collector, San Francisco, Cal	451 71	
J. S. Smith, collector, Bangor, Me	87	
V. Smith, collector, Duluth, Minn	105 00	
Carried forward	73,408 97	329,931,445 79

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.			
	Brought forward	$708,048 45	$386,019,502 68
	Fulfilling treaties with—		
130	Creeks	69,968 40	
130	Crows	44,742 30	
130	Iowas	1,759 94	
130	Kansas	9,391 54	
130	Kickapoos	3,192 74	
131	Miamis of Eel River	1,023 61	
131	Miamis of Indiana	7,145 14	
131	Miamis of Kansas	869 57	
131	Nez Percés	3,220 72	
131	Omahas	9,129 52	
132	Osages	22,042 93	
132	Otoes and Missourias	4,653 53	
132	Pawnees	29,799 49	
132	Poncas	6,582 88	
133	Pottawatomies	20,512 25	
133	Pottawatomies of Huron	400 00	
133	Quapaws	1,063 62	
133	Sacs and Foxes of the Mississippi	44,487 34	
133	Sacs and Foxes of the Missouri	7,870 00	
133	Seminoles	28,500 00	
133	Senecas	2,060 00	
133	Senecas of New York	11,569 41	
133	Shawnees	5,000 00	
133	Eastern Shawnees	622 42	
133	Shoshones	8,596 14	
134	Sioux of Yankton tribe	18,640 21	
134	Sisseton, Wahpeton, and Santee Sioux of Lake Traverse and Devil's Lake	2,244 22	
134	Six Nations of New York	4,492 67	
135	Winnebagoes	73,588 77	
135	Yakamas	5,243 48	
135	Cherokees, proceeds of lands	40,000 00	
135	Menomonees, proceeds of lands	5,909 53	
135	Miamis of Kansas, proceeds of lands	1,757 57	
135	Pawnees, proceeds of lands	302,626 22	
135	Pottawatomies, proceeds of lands	182 69	
135	Sacs and Foxes of Missouri, proceeds of lands	2,588 76	
135	Proceeds of Choctaw orphan reservation	1,608 04	
135	Proceeds of Sioux Reservations in Minnesota and Dakota	83,749 07	
136	Civilization fund	2,831 91	
	Interest—		
136	On Cherokee asylum fund	3,207 36	
136	Due Cherokees on lands sold to Osages	36,206 88	
136	On Cherokee national fund	26,060 00	
136	Cherokee national fund	30,760 42	
136	Cherokee school fund	2,410 00	
136	Cherokee school fund	26,006 44	
136	Cherokee orphan fund	12,775 16	
136	Chickasaw national fund	19,820 00	
136	Chickasaw national fund	48,469 28	
136	Chippewa and Christian Indians	2,111 25	
136	Choctaw school fund	2,473 64	
136	Choctaw general fund	27,000 00	
136	Choctaw general fund	184 44	
136	Delaware general fund	8,930 00	
137	Delaware general fund	36,651 74	
137	Iowa fund	3,520 00	
137	Iowa fund	6,445 72	
137	Kansas school fund	6,023 63	
137	Kaskaskia, Peoria, Wea, and Piankeshaw fund	4,801 00	
137	Kaskaskia, Peoria, Wea, and Piankeshaw school fund	1,335 00	
137	Kaskaskia, Peoria, Wea, and Piankeshaw school fund	131 24	
137	Kickapoo general fund	6,697 18	
137	Menomonee fund	950 00	
137	Menomonee fund	7,219 79	
137	Osage fund	165,812 87	
138	Osage school fund	3,370 21	
138	Otoe and Missouria fund	11,939 42	
138	Ponca fund	3,470 34	
138	Pottawatomie education fund	2,987 29	
138	Pottawatomie general fund	7,130 00	
138	Pottawatomie mills fund	398 44	
139	Sacs and Foxes of the Mississippi fund	11,250 53	
139	Seneca fund	1,024 49	
139	Seneca fund, Tonawanda band	3,868 63	
139	Seneca and Shawnee fund	566 34	
139	Eastern Shawnee fund	421 15	
139	Stockbridge consolidated fund	3,794 30	
	Carried forward	2,133,939 26	386,019,502 68

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$73,408 97	$329,931,445 79
F. N. Shurtleff, collector, Willamette, Oreg	10 00	
J. Shepard, collector, Saint Mary's, Ga	20 00	
J. A. Tibbetts, collector, New London, Conn	309 89	
A. Tibbetts, collector, Paso del Norte, N. Mex	286 82	
J. M. Tarble, collector, Pensacola, Fla	471 72	
F. A. Vaughan, collector, Saluria, Tex	403 02	
W. Wells, collector, Vermont, Vt	1,256 87	
E. H. Webster, collector, Baltimore, Md	498 77	
J. H. Wilson, collector, Georgetown, D. C	40 00	
G. W Warren, collector, Cape Vincent, N. Y	382 15	
R. Worthington, collector, Boston, Mass	813 03	
F. N. Wicker, collector, Key West, Fla	595 66	
		78,496 90

From emolument fees—customs.

J. A. P. Allen, collector, New Bedford, Mass	509 93	
A. A. Burleigh, collector, Aroostook, Me	963 50	
F. J. Babson, collector, Gloucester, Mass	620 61	
J. W. Burke, collector, Mobile, Ala	1,906 49	
A. J. Beers, collector, New Haven, Conn	2,350 23	
G. E. Bowden, collector, Norfolk, Va	2,466 74	
D. V Bell, collector, Detroit, Mich	13,891 96	
J. Bookwalter, collector, Minnesota, Minn	1,561 64	
W. P. Canaday, collector, Wilmington, N. C	1,404 56	
D. F. Davis, collector, Bangor, Me	1,242 48	
W. H. Daniels, collector, Oswegatchie, N. Y	4,800 75	
A. C. Davis, collector, Beaufort, N. C	442 28	
M. A. Edgar, collector, Perth Amboy, N. J	124 77	
B. Flaglor, collector, Niagara, N. Y	14,247 40	
H. P. Farrow, collector, Brunswick, Ga	136 79	
C. A. Gould, collector, Buffalo, N. Y	37,420 56	
J. L. Haynes, collector, Brazos, Tex	1,044 32	
W. Hartsuff, collector, Huron, Mich	140 47	
G. W. Howe, collector, Cuyahoga, Ohio	736 91	
A. W. Hall, collector, Milwaukée, Wis	6,725 95	
I. Hacker, collector, Southern Oregon	57	
T. S. Hodson, collector, Easton, Md	157 76	
W. M. Haycock, collector, Passamaquoddy, Me	4,581 42	
H. L. Jones, collector, Oswegatchie, N. Y	1,680 90	
H. A. Kennedy, collector, Waldoborough, Me	1,055 33	
W. Livingstone, jr., collector, Detroit, Mish	1,398 28	
J. J. Lamoree, collector, Oswego, N. Y	26,062 16	
A. G. Mallory, collector, Galveston, Tex	1,806 87	
S. Moffett, collector, Champlain, N. Y	20,154 51	
D. McLaughlin, collector, Michigan, Mich	7,089 54	
E. McMurtrie, collector, Minnesota, Minn	940 90	
C. E. Morris, collector, Genesee, N. Y	674 12	
N. B. Nutt, collector, Passamaquoddy, Me	1,611 08	
C. Y. Osburn, collector, Superior, Mich	2,131 26	
E. J. Pennypacker, collector, Wilmington, N. C	1,894 34	
N. Plato, collector, Corpus Christi, Tex	1,476 59	
V. Smith, collector, Duluth, Minn	1,346 45	
J. Spaulding, collector, Chicago, Ill	17,751 20	
W. T. Simpson, collector, Genesee, N. Y	5,385 87	
F. N. Shurtleff, collector, Willamette, Oreg	4,103 90	
J. P. Sanborn, collector, Huron, Mich	1,766 64	
J. S. Smith, collector, Bangor, Me	453 05	
J. M. Tarblel collector, Pensacola, Fla	248 79	
C. Von Cleve, collector, Yaquina, Oreg	1 25	
G. W. Warren, collector, Cape Vincent, N. Y	3,843 63	
W. Wells, collector, Vermont, Vt	27,338 27	
		227,693 02

From fines, penalties, and forfeitures—judiciary.

W. A. Allen, clerk, eastern district Texas	17 30	
T. C. Acton, assistant treasurer, New York	53 82	
Andrews & Thornburgh	134 45	
H. E. Andrews, clerk, western district Tennessee	352 87	
E. Bill, clerk, northern district Ohio	619 45	
A. E. Buck, clerk, northern district Georgia	380 40	
N. C. Butler, clerk, southern district Indiana	949 70	
W. H. Bradley, clerk, northern district Illinois	576 45	
L. T. Baxter, clerk, middle district Tennessee	619 65	
E. Beall, clerk, —— district Texas	352 45	
C. Barry, clerk, eastern district Virginia	70 00	
E. F. Bishop, clerk, —— district Colorado	3,217 08	
A. G. Boone, Indian agent	17 47	
B. L. Benedict, clerk, eastern district New York	25 00	
M. B. Converse, clerk, southern district Illinois	2,037 94	
W. G. Coffin	6 00	
Carried forward	9,430 83	330,237,635 71

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.			
	Brought forward	$2,133,939 26	$386,019,502 68
	Interest—		
139	On Ute 5 per cent. fund	4,147 72	
139	Ute 4 per cent. fund	41,500 01	
139	Payment to North Carolina Cherokees	1,977 22	
139	Eastern Shawnee fund	81 07	
	Incidental expenses, Indian service in—		
139	Arizona	18,481 96	
140	California	25,309 04	
140	Colorado	1,507 76	
141	Dakota	3,624 58	
141	Idaho	899 27	
141	Montana	4,007 37	
142	Nevada	12,460 79	
142	New Mexico	4,762 72	
142	Oregon	17,093 95	
143	Utah	8,731 70	
143	Washington	13,077 21	
144	Wyoming	530 64	
	Support of—		
144	Apaches, Kiowas, and Comanches	21,903 25	
144	Apaches of Arizona and New Mexico	6,710 36	
144	Arapahoes, Cheyennes, Apaches, Kiowas, Comanches, and Wichitas	384,098 10	
144	Arickarees, Gros Ventres, and Mandans	36,680 93	
145	Assinaboines in Montana	14,779 25	
145	Blackfeet, Bloods, and Piegans	33,398 64	
146	Cheyennes and Arapahoes	20,565 75	
146	Chippewas of Lake Superior	12,505 67	
146	Chippewas of the Mississippi	3,746 11	
146	Chippewas, Pillagers, and Lake Winnebagoshish bands	2,169 80	
147	Chippewas of Red Lake and Pembina tribes	14,506 99	
147	Chippewas of Turtle Mountains band	7,564 23	
147	Chippewas on White Earth Reservation	7,952 55	
148	Confederated tribes and bands in Middle Oregon	6,677 78	
148	Crows	73,179 93	
148	D'Wamish and other allied tribes in Washington	9,972 82	
159	Flatheads and other confederated tribes	12,824 76	
149	Gros Ventres in Montana	19,370 98	
149	Indians in Arizona and New Mexico	272,800 24	
150	Indians of central superintendency	13,469 77	
150	Indians of Fort Hall Reservation	18,890 99	
151	Indians of Fort Peck Agency	71,869 33	
151	Indians of Klamath Agency	5,833 82	
152	Indians of Lemhi Agency	18,466 09	
152	Indians of San Carlos Reservation	30,648 91	
152	Indian schools	307,211 76	
154	Indian school near Arkansas City	20,000 00	
154	Indian school at Carlisle, Pa	68,500 00	
154	Indian school at Forest Grove, Oreg	34,538 76	
155	Indian school at Genoa, Nebr	14,300 26	
155	Indian children at Hampton school, Virginia	16,341 88	
155	Indian children at schools and in private families	35,126 42	
155	Indian children at schools in States	40,391 75	
156	Kansas Indians	4,874 18	
156	Kickapoos	5,605 02	
156	Klamaths and Modocs	6,079 46	
157	Makahs	2,949 78	
157	Menomonees	4,195 31	
157	Modocs in Indian Territory	4,521 02	
157	Molels	2,906 60	
157	Navajoes	29,789 19	
158	Nez Percés	3,385 05	
158	Nez Percés of Joseph's band	18,574 67	
158	Northern Cheyennes and Arapahoes	62,568 72	
159	Pawnees	16,830 19	
159	Poncas	30,007 07	
160	Quapaws	253 42	
160	Qui-nai-elts and Quil-leh-utes	3,375 28	
160	Sacs and Foxes of Missouri	166 00	
160	Shoshones and Bannocks	34,113 09	
160	Schools not otherwise provided for	3,812 54	
161	Shoshones in Wyoming	16,269 81	
161	Sioux of Devil's Lake	8,000 00	
161	Sioux of different tribes, including Santee Sioux of Nebraska	1,804,809 15	
163	Sioux of Lake Traverse	7,995 53	
163	Sioux of Yankton tribe	44,348 37	
163	S'Klallams	4,517 73	
163	Tonkawas of Fort Griffin, Tex	2,992 35	
163	Utahs, Tabequache band	706 31	
	Carried forward	6,072,775 99	386,019,502 68

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$9,430 83	$330,237,635 71
T. Campbell	149 69	
J. H. Clark, clerk, eastern district Missouri	13 20	
J. H. Carpenter, Indian agent	132 29	
C. K. Clark, internal revenue stamp agent	18 78	
Clem & Dingman	85 48	
S. B. Crail, clerk, northern district New York	119 02	
D. T. Davison, clerk, Michigan	370 70	
L. B. Dellicker, clerk, West Virginia	759 50	
M. M. Drew, marshal, California	60 50	
A. H. Davis, clerk, Maine	400 00	
E. G. Edgerton, clerk, Dakota	2,675 00	
M. Erwin, clerk, southern district Georgia	208 30	
B. W. Etheredge, clerk, western district Tennessee	380 38	
L. T. Fix	17 95	
J. H. Finks, clerk, Texas	48 63	
J. S. Fowler, clerk, eastern district Virginia	80 35	
E. D. Frank, clerk, Nebraska	559 22	
R. L. Goodrich, clerk, eastern Arkansas	272 48	
H. C. Geisburg, clerk Western Missouri	28 50	
T. Griffith, clerk, southern New York	552 90	
C. B. German, clerk, northern New York	140 00	
J. T. Gibson, clerk, western Missouri	2 70	
A. T. Gierlitz	5 00	
S. Hoffman, clerk, California	444 44	
C. H. Hill, clerk, Massachusetts	1,783 50	
W. E. Howard, clerk, southern Ohio	3,167 53	
C. B. Hinsdell, clerk, western Michigan	818 90	
O. B. Hillis, clerk, Minnesota	136 70	
G. R. Hill, clerk, northern Mississippi	79 50	
W. S. Harsha, clerk, eastern Michigan	526 00	
A. R. Humes, clerk, eastern Tennessee	233 90	
J. A. Jones, clerk, southern Illinois	18 00	
A. M. Jones, marshal, northern Illinois	250 00	
E. Kurtz, clerk, eastern Wisconsin	491 97	
F. H. King, clerk, eastern Georgia	364 35	
J. N. Kerns, marshal, eastern Pennsylvania	10 00	
R. H. Lamson, clerk, Oregon	966 40	
C. S. Lincoln, clerk, eastern Pennsylvania	1,136 48	
G. E. Lamon, clerk, attorney	28 71	
R. B. Lehman, clerk, eastern North Carolina	221 95	
C. H. Learing	22 00	
H. K. Love, clerk, southern Iowa	42 12	
T. Muffley, clerk, Montana	511 84	
S. C. McCandless, clerk, Western Pennsylvania	2,261 17	
C. McMichael, marshal, Colorado	60 00	
J. Y. Moore, clerk, West Virginia	54 10	
S. J. Moore, clerk, eastern Texas	58 70	
J. M. McKee, clerk, southern Mississippi	18 65	
G. Merrell, receiver public moneys; Topeka, Kans	80 20	
N. C. Morgan, clerk, Dakota	430 00	
E. R. Mason, clerk, Iowa	25 47	
E. E. Marvin, clerk, Connecticut	696 84	
R. G. O'Brien, clerk, Washington Territory	100 00	
W. P. Preble, clerk, Maine	858 08	
H. J. Peck, clerk, Wisconsin	51 28	
G. F. Potter, receiver public moneys, Pembina, Dak	44 38	
J. W. Payne, clerk, North Carolina	111 81	
A. J. Ricks, clerk, southern Ohio	33 91	
J. E. Read, clerk, western North Carolina	460 60	
J. S. Ray, receiver public moneys, Monroe, La	135 30	
E. Root, attorney, southern New York	173 29	
W. Robbins, clerk, northern New York	325 00	
N. J. Reddick, clerk, eastern North Carolina	115 70	
E. H. Smith, clerk, New Mexico	174 60	
E. M. Seabrook, clerk, South Carolina	76 00	
L. S. B. Sawyer, clerk, California	660 74	
G. P. Sanger, attorney, Massachusetts	1,266 90	
W. W. Spalding, assistant treasurer, San Francisco, Cal	84 42	
F. M. Stewart, clerk, western Wisconsin	1,075 00	
L. Schmidt, clerk, western Missouri	402 39	
W. A. Spencer, clerk, Minnesota	595 63	
B. B. Smalley, clerk, Vermont	2,970 00	
J. G. Stetson, clerk, Massachusetts	96 65	
J. Seavey, clerk, Washington Territory	47 72	
Treasurer United States	350 85	
A. J. Van Ingen, clerk, northern Iowa	127 20	
S. Wheeler, clerk, western Arkansas	1,434 86	
J. M. Wheaton, clerk, Louisiana	2 00	
J. C. Wilson, clerk, Kansas	1,099 90	
W. Wilkinson, clerk, Arizona	274 58	
A. S. Worthington, attorney, D. C	20 00	
		44,618 80
Carried forward		330,282,254 51

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.			
	Brought forward	$6,072,775 99	$386,019,502 68
	Support of—		
163	Confederated band of Utes	70,698 13	
164	Walla Walla, Cayuse, and Umatilla tribes	6,670 50	
164	Yakamas and other Indians	20,109 46	
165	Additional beef, Indian service	45,431 29	
165	Appeal in Crow Dog case to United States Supreme Court	1,000 00	
165	Appraisal and sale of land in Nebraska belonging to the Omaha, Pawnee, Otoe, and Missouria tribe of Indians (reimbursable)	644 94	
165	Consolidating Indian agencies	5,285 00	
165	Expenses of the Ute Commission	2,081 91	
165	Gratuity to certain Ute Indians	4,566 66	
165	Indian school buildings	14,399 24	
166	Indian school buildings near Arkansas City	22,331 70	
165	Maintaining peace among and with the various tribes and bands of Indians	3,355 48	
	Maintenance and education of—		
166	Catherine and Sophia Germain	2,625 00	
166	Adelaide and Julia Germain	250 00	
166	Helen and Heloise Lincoln	3,093 75	
166	Negotiating with Sioux for modification of treaties	5,000 00	
166	Payment of indemnity to Poncas	2,000 00	
166	Payment to Ute Indians for individual improvements	100 00	
	Relief of—		
166	Destitute Indians in Nevada	1,150 00	
166	Louisa Boddy	5,400 00	
166	Indians at Crow, Fort Belknap, Fort Peck, and Blackfeet Agencies	71,022 11	
166	Removal of Pawnees (reimbursable)	7,135 79	
166	Removal and support of confederated band of Utes	67,645 42	
166	Removal and support of Otoes and Missourias	171 36	
166	School buildings and support of schools for Indians of Sioux Reservation, Dakota	24,194 84	
167	Stock cattle for Indian industrial schools	4,510 00	
167	Stock cattle or sheep for Indian tribes	21,059 44	
167	Survey and appraisement of Omaha lands (reimbursable)	2,500 00	
167	Survey and appraisement of Umatilla lands (reimbursable)	3,500 00	
167	Survey of Indian reservations	2,500 00	
		6,493,208 01	
	Deduct repayments:		
	Fulfilling treaties with—		
129	Arapahoes and Cheyennes of Upper Arkansas River	$622 28	
130	Chippewas of Red Lake and Pembina tribe of Chippewaws	5 78	
131	Navajoes	1 18	
135	Proceeds of New York Indian lands in Kansas	1,184 43	
136	Creek Orphan fund	114 74	
136	Interest on Creek Orphan fund	383 27	
137	Interest on L'Anse and Vieux de Sert Chippewa fund	7 75	
	Support of—		
151	Indians in Idaho	41 50	
156	Jicarilla and Mescalero Apaches, including Mescaleros	135 32	
157	Mixed Shoshones, Bannocks, and Sheepeaters	4 28	
157	Moquis Pueblos	30 80	
159	Pueblos of New Mexico	1,510 36	
165	Appraisal and survey of Otoe and Missouria lands (reimbursable)	8 15	
166	Purchase of wagens, teams, tools, &c., for northern superintendency	53 76	
166	Reimbursement to Creek Orphan fund	723 80	
166	Reservoir at headwaters of the Mississippi	15,664 00	
		20,491 40	
	Total expenses Interior—Indians		6,472,716 61

Interior—pensions.

167	Army pensions	53,978,227 32	
177	Pay and allowances, Army pensions	252,836 69	
177	Fees of examining surgeons, Army pensions	951,852 80	
178	Contingent expenses of agents, Army pensions	5,731 20	
178	Navy pensions	246,575 15	
179	Pay and allowances, Navy pensions	1,982 56	
179	Fees of examining surgeons, Navy pensions	13,683 68	
179	Relief of Mary L. and Ella Walker	1,858 50	
		55,452,747 90	
	Carried forward		392,492,219 29

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

FROM EMOLUMENT FEES—JUDICIARY.

Brought forward		$330,282,254 51
C. C. Allen, marshal, western Missouri	$1,959 79	
N. P. Banks, marshal, Massachusetts	1,871 39	
S. Bell, clerk, eastern Pennsylvania	1,130 89	
J. W. Chapman, marshal, southern Iowa	360 45	
V. Dell, marshal, western Arkansas	1,834 70	
J. M. Deuel, clerk, southern New York	1,455 76	
T. Griffith, clerk, southern New York	787 62	
H. D. Gamble, clerk, western Pennsylvania	338 74	
R. L. Goodrich, clerk, eastern Arkansas	186 38	
O. B. Hillis, clerk, Minnesota	258 98	
C. S. Lincoln, clerk, eastern Pennsylvania	1,045 41	
S. H. Lyman, clerk, southern New York	954 57	
R. N. McLarin, marshal, Minnesota	411 33	
C. D. MacDougall, marshal, northern New York	1,458 97	
E. Speers, attorney, northern Georgia	292 70	
J. H. Sloss, marshal, northern Alabama	1,545 69	
J. R. Tanner, marshal, southern Illinois	7 19	
		15,900 56
From immigrant fund.		
J. A. P. Allen, collector, New Bedford, Mass	187 50	
R. Alvarez, deputy collector, Key West, Fla	158 50	
A. J. Beers, collector, New Haven, Conn	5 00	
D. V. Bell, collector, Detroit, Mich	26 50	
A. S. Badger, collector, New Orleans, La	2,058 00	
F. J. Babson, collector, Gloucester, Mass	74 50	
J. W. Burke, collector, Mobile, Ala	3 00	
H. De B. Clay, collector, Yorktown, Va	11 50	
F. N. Dow, collector, Portland, Me	858 00	
W. H. Daniels, collector, Oswegatchie, N. Y	59 50	
J. S. Hanover, collector, Fairfield, Conn	5 00	
T. A. Henry, collector, Pamlico, N. C	1 50	
J. F. Hartranft, collector, Philadelphia, Pa	9,495 50	
C. Harris, collector, Providence, R. I	1 00	
W. G. Henderson, collector, Pearl River, Miss	14 00	
J. R. Jolley, collector, Teche, La	70 50	
T. F. Johnson, collector, Savannah, Ga	50	
J. J. Lamoree, collector, Oswego, N. Y	50	
W. Livingstone, jr., collector, Detroit, Mich	25 50	
C. E. Morris, collector, Alaska, Alaska	12 50	
A. G. Malloy, collector, Galveston, Tex	986 50	
C. Y. Osburn, collector, Superior, Mich	292 00	
C. H. Odell, collector, Salem, Mass	3 50	
N. Plato, collector, Corpus Christi, Tex	50	
W. H. Robertson, collector, New York, N. Y	172,312 00	
W. T. Simpson, collector, Genesee, N. Y	6 50	
V. Smith, collector, Duluth, Minn	208 00	
J. Spalding, collector, Chicago, Ill	27 50	
W. H. Sears, collector, San Francisco, Cal	137 50	
E. L. Sullivan, late collector, San Francisco, Cal	725 00	
J. M. Tarble, collector, Pensacola, Fla	13 00	
F. N. Wicker, collector, Key West, Fla	1,151 00	
E. H. Webster, collector, Baltimore, Md	17,748 50	
G. W. Warren, Cape Vincent, N. Y	80 00	
R. Worthington, collector, Boston, Mass	17,526 50	
		224,286 50
From proceeds of sales of Government property.		
Treasury Department	35,899 52	
War Department:		
Quartermaster's	318,875 63	
Ordnance	1,810 81	
Medical	1,660 52	
Signal Office	21,412 65	
Adjutant-General's Office	202 47	
Paymaster-General's Office	261 98	
Engineer's Office	10,487 24	
Civil	604 10	
Miscellaneous	1,113 70	
Navy Department:		
Equipment and Recruiting	35,940 15	
Construction and Repair	8,163 89	
Yards and Docks	9,888 91	
Provisions and Clothing	5,732 74	
Medicine and Surgery	315 10	
Navigation	11,452 35	
Ordnance	290 33	
Steam-Engineering	59,007 27	
Marine	666 48	
Miscellaneous	411 14	
Carried forward	524,196 98	330,522,441 57

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.				
	Brought forward		$55,452,747 90	$392,492,219 29
	Deduct repayments:			
178	Arrears of Army pensions	$8,633 01		
178	Fees for vouchers, arrears Army pensions	70 80		
178	Arrears of Navy pensions	14,781 53		
178	Fees for vouchers, arrears Navy pensions	34 50		
			23,519 84	
	Total expenses Interior—Pensions			55,429,228 06
	MILITARY ESTABLISHMENT.			
	Pay Department.			
179	Pay, &c., of the Army		11,761,455 82	
182	Pay, &c., of the Military Academy		195,506 07	
183	Collection and payment of bounty, prize money, &c., colored soldiers and sailors		468 06	
183	Bounty to Fifteenth and Sixteenth Missouri Cavalry Volunteers		26,000 00	
183	Bounty to volunteers, their widows, and legal heirs		147,305 63	
218	Bounty under act July 28, 1866		58,795 55	
183	Pay of two and three years volunteers		117,103 07	
218	Extra pay to officers and men who served in the Mexican war		500 00	
			12,307,134 20	
	Deduct repayments:			
182	Draft and substitute fund	$24 93		
182	Collecting, drilling, and organizing volunteers	99 79		
183	Bounty to volunteers and regulars on enlistment	51 94		
			176 66	
	Total expenses Pay Department			12,306,957 54
	Military Academy.			
206	Miscellaneous items and incidental expenses		45,321 31	
206	Buildings and grounds		14,256 29	
206	Current and ordinary expenses		30,354 24	
	Total expenses Military Academy			89,931 84
	Commissary Department.			
184	Subsistence of the Army			1,420,654 30
	Quartermaster's Department.			
185	Regular supplies		2,833,618 42	
189	Incidental expenses		683,256 89	
191	Barracks and quarters		694,954 31	
192	Fifty per centum of arrears of Army transportation due certain land-grant railroads		89,398 84	
193	Transportation of the Army and its supplies		3,299,531 60	
196	Transportation of the Army and its supplies, Pacific Railroads		1,586,035 72	
197	Horses for cavalry and artillery		188,339 31	
197	Clothing and camp and garrison equipage		1,385,244 64	
201	National cemeteries		90,045 29	
201	Pay of superintendents of national cemeteries		59,882 80	
202	Road from Chattanooga, Tenn., to national cemetery		2,500 00	
202	Road from Mound City to national cemetery		5,000 00	
215	Purchase of the Arlington estate		25,000 00	
202	Headstones for graves of soldiers in private cemeteries		30,356 14	
			10,973,163 96	
	Deduct repayments:			
202	Road from Fort Scott, Kans., to national cemetery	$23 70		
183	Transportation of officers and their baggage	194 14		
			217 84	
	Total expenses Quartermaster's Department			10,972,946 12
	Medical Department.			
202	Medical and hospital department		179,947 38	
203	Medical Museum and Library		10,000 00	
203	Artificial limbs		182,453 55	
203	Appliances for disabled soldiers		198 25	
203	Construction and repair of hospitals		98,942 14	
218	Army and Navy Hospital, Hot Springs, Ark		56,000 00	
	Total expenses Medical Department			527,541 32
	Carried forward			473,239,478 47

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$524,196 98	$330,522,441 57
Miscellaneous:		
Legislative	1,736 88	
District of Columbia	627 75	
Public Printer	11,144 40	
Miscellaneous	94 38	
Department of State	2,077 15	
Department of Agriculture	1,701 77	
Department of Justice	145 75	
Department of the Interior	4,909 68	
		546,634 74
From direct tax		70,720 75
Mileage of examiners		1,490 60
From Pacific Railways:		
Reimbursement of interest on bonds, Union Pacific	971,895 61	
Reimbursement of interest on bonds, Central Pacific	192,358 69	
Sinking fund, Union Pacific	1,802,878 75	
Sinking fund, Central Pacific	242,896 30	
Section 5260, Revised Statutes, Kansas Pacific	86,062 01	
Section 5260, Revised Statutes, Sioux City and Pacific	9,782 93	
Section 5260, Revised Statutes, Union Pacific	100,919 31	
Section 5260, Revised Statutes, Central Pacific	100 49	
Section 5260, Revised Statutes, Central Branch Union Pacific	10,244 17	
		3,417,138 26
Relief of sick and disabled seamen		5,824 84
Proceeds of loans:		
United States notes	85,948,236 00	
Gold certificates	41,470,000 00	
Silver certificates	51,200,000 00	
Certificates of deposits	26,855,000 00	
Funded loan of 1907	75,400 00	
Loan of July 12, 1882	1,329,250 00	
		206,877,886 00
Revenues, District of Columbia:		
General fund	1,821,706 34	
Water fund	138,452 55	
Redemption fund	726 19	
Washington special-tax fund	7,599 96	
Redemption tax-lien certificates	975 14	
Assessment certificates	1,054 06	
Surplus fund	4 00	
Pennsylvania avenue paving scrip	207 89	
		1,970,726 13
Interest on Indian trust-fund stocks	17,585 34	
Proceeds Osage lands, act July 15, 1876, &c	460,901 28	
Proceeds Osage ceded lands, act August 11, 1876, &c	2,534 56	
Proceeds Cherokee school lands	1,124 30	
Proceeds Otoe and Missouria Indian lands	185,552 47	
Proceeds Miami Indian lands, March 3, 1873	15,652 96	
Proceeds Kansas Indian lands, May 8, 1872	39,361 17	
Proceeds Sacs and Foxes of Missouri Indian lands, August 15, 1876	1,855 35	
Proceeds Pawnee Indian lands	88,687 66	
Proceeds Sioux Indian Reservation in Minnesota and Dakota	6,414 28	
Proceeds Cherokee lands	89,004 12	
Interest on deferred payments sale of Indian lands	8,071 86	
Reimbursement to United States on account of appropriations to meet interest on non-paying Indian trust-fund stocks	56,922 25	
Reimbursement to United States on account of appropriations for surveying Pawnee lands, &c	310,406 95	
Indian trust funds	1,608 04	
		1,285,682 59
Sale of ordnance materials, War Department	96,380 55	
Sale of ordnance materials, Navy Department	2,799 24	
Sale of powder and projectiles	3,084 00	
Small-arms, Navy Department	2,680 98	
Sale of condemned naval vessels	200,000 00	
		304,944 77
Deposits by individuals for expenses of surveying		664,111 78
Fees on letters patent		1,148,022 85
Tax on circulation of national banks		3,108,730 13
Rent of public buildings and lots		13,746 54
Interest on debts due the United States		13,366 65
Miscellaneous items		1,057 32
Assessment upon owners for deaths on shipboard		1,050 00
Profits on coinage	$955,866 68	
Profits on coinage standard silver dollar	3,235,144 35	
Deduction on bullion deposits	56,037 62	
Assays and chemical examination of ores	3,560 65	
		4,250,609 30
Hot Springs, Arkansas, water and ground rents	891 07	
Hot Springs, Arkansas, reservation lands	30,053 00	
		30,944 07
Carried forward		554,235,128 89

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.			
	Brought forward		$473,239,478 47
	Ordnance Department.		
204	Ordnance service	$117,394 38	
204	Ordnance, ordnance stores, and supplies	399,817 17	
204	Testing-machine	9,996 11	
204	Powder and projectiles, proceeds of sales	42,808 00	
204	Ordnance material, proceeds of sales	75,000 00	
204	Manufacture and purchase of magazine guns	30,250 00	
205	Manufacture of arms at national armories	401,000 00	
205	Arming and equipping the militia	149,955 96	
206	Powder depot, Dover, N. J	40,000 00	
206	Repairs of Arsenals	39,999 74	
206	Springfield Arsenal, Massachusetts	14,908 32	
206	Frankford Arsenal, Philadelphia	1,500 00	
206	Rock Island Arsenal, Illinois	202,500 00	
206	Rock Island Bridge, Illinois	9,250 00	
206	Benicia Arsenal, California	104,619 80	
206	New York Arsenal, New York	5,500 00	
206	Purchase of Sawyer's patent for canister shot	25,000 00	
		1,669,499 48	
	Deduct repayment:		
205	Sea-coast batteries for instruction of militia	477 20	
	Total expenses Ordnance Department		1,669,022 28
	Engineer Department.		
204	Torpedoes for harbor defense	75,000 00	
206	Preservation and repair of fortifications	168,013 23	
206	Engineer depot at Willets Point	7,000 00	
206	Fort Jackson, Mississippi River, Louisiana	2,527 50	
206	Armament of fortifications	287,964 57	
210	Sea wall, Governor's Island, New York	33,000 00	
	Total expenses Engineer Department		573,505 30
	Improving harbors.		
207	Belfast, Me	$200 00	
207	Portland, Me	10,000 00	
207	Portsmouth, N. H	5,000 00	
207	Burlington, Vt	3,000 00	
207	Hyannis, Mass	17 81	
207	Boston, Mass	66,116 70	
207	Nantucket, Mass	20,172 10	
207	Newburyport, Mass	35,000 00	
207	Lynn, Mass	3,181 12	
207	Provincetown, Mass	22 93	
207	Plymouth, Mass	956 71	
207	Scituate, Mass	1,672 28	
207	Wareham, Mass	2,379 32	
207	Of refuge, Wood's Holl, Mass	40,000 00	
207	Newport, R. I	14,305 50	
207	New Haven, Conn	15,000 00	
207	Improving breakwater, New Haven, Conn	35,000 00	
207	Improving harbor, Buffalo, N. Y	65,000 00	
207	Improving channel in Gowanus Bay, New York	20,000 00	
207	Improving harbor, Port Chester, N. Y	1,600 00	
207	Improving harbor, Charlotte, N. Y	30,000 00	
207	Improving harbor, Greenport, N. Y	5,000 00	
207	Improving harbor, Great Sodus Bay, New York	17,000 00	
207	Improving harbor, Little Sodus Bay, New York	17,000 00	
207	Improving harbor, Mamaroneck, N. Y	14,000 00	
207	Improving harbor, Ogdensburg, N. Y	8,000 00	
207	Improving harbor, Oswego, N. Y	40,158 40	
207	Improving harbor, Pultneyville, N. Y	3,000 00	
207	Improving harbor, Sheepshead Bay, New York	9,000 00	
207	Improving Sackett's Harbor, New York	5,969 50	
207	Improving harbor, Wilson, N. Y	8,000 00	
207	Improving harbor Erie, Pa	3,500 00	
208	Improving ice harbor, Marcus Hook, Pa	18,000 00	
208	Improving harbor, Keyport, N. J	30,141 45	
208	Improving harbor, Raritan Bay, New Jersey	40,000 00	
208	Improving harbor, Delaware Breakwater, Delaware	90,000 00	
208	Constructing pier in Delaware Bay near Lewes, Del	4,000 00	
208	Ice harbor at Reedy Island, Delaware	500 00	
	Improving harbor at—		
208	Wilmington, Del	26,000 00	
208	Baltimore, Md	295,000 00	
	Carried forward	1,002,893 82	475,482,006 05

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward		$554,235,128 89
Depredations on public lands		29,548 44
Interest on deposits with Seligman Bros		11,008 66
Soldiers' Home		367,092 04
Reimbursement to United States salaries office of internal revenue	$2,500 00	
Reimbursement to United States by national bank redemption agency salaries office of treasurer, 1883	149,643 96	
Reimbursement to United States by national bank redemption agency salaries office Comptroller of Currency, 1883	20,799 46	
		172,943 42
Conscience fund		8,257 28
Passport fees		22,656 69
Copying fees, General Land Office		11,392 81
Tax on seal-skins		251,875 00
Trust fund, support of free schools South Carolina		1,823 48
Unexpended receipts military telegraph lines		17,074 72
Forfeiture by contractors		1,670 93
Sale of property under internal revenue laws	$7,273 80	
Rent of property under internal revenue laws	292 74	
		7,566 54
Fees for inspecting gas-meters District of Columbia		620 00
Donations for liquidating public debt		63,314 97
Fees under national health laws		267 43
Premium on transfer and other drafts		1,489 98
Surplus indemnity fund		25 10
Cost of printing records in Supreme Court cases		16,432 06
Proceeds of property under section 3749 Revised Statutes		3,859 50
Copyright fees		7,280 00
Property devised to the United States by John Gardner		5,485 15
Interest on Nashville and Chattanooga Railroad bonds	$20,000 00	
Interest on East Tennessee, Virginia and Georgia Railroad bonds	3,800 00	
Interest on Nashville and Decatur Railroad bonds	7,057 53	
		30,857 53
Payment by Nashville and Decatur Railroad Company		64,000 00
New engine-house for engine No. 5, District of Columbia		442 50
Rebate of interest		12
From Government of Mexico, claims of S. A. Belding & Co		2,610 82
Sales of real estate at Vincennes, Ind		535 40
Sales of products in experiments in manufacture of sugar		842 18
Indian moneys, proceeds of labor, &c		989 44
Sale of military barracks and lands Savannah, Ga		60,643 76
Redemption of property, act June 8, 1872		21 08
Add unavailable from W. N. Haldeman, late United States depositary, Louisville, Ky.		1,500 00
Total receipts		555,399,255 92
Balance in the Treasury, July 1, 1883		374,189,081 98
		929,588,337 90

Carried forward 929,588,337 90

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.			
	Brought forward	$1,002,893 82	$475,482,006 05
	Improving harbor at—		
208	Cambridge, Md	187 70	
208	Cambridge and Pocomoke River, Maryland	2,500 00	
208	Norfolk, Va	39,934 83	
208	Charleston, S. C	102,043 03	
208	Savannah, Ga	79,521 88	
208	Key West, Fla	25,000 00	
208	Pensacola,, Fla	65,000 00	
208	Mobile, Ala	85,000 00	
208	New Orleans, La	45,173 75	
208	Brazos Santiago, Tex	60,000 00	
208	Galveston, Tex	41,000 00	
208	Ashtabula, Ohio	15,000 00	
208	Cleveland, Ohio	212,000 00	
208	Of refuge near Cincinnati, Ohio	400 00	
208	Black River, Ohio	5,000 00	
208	Fairport, Ohio	2,200 00	
208	Toledo, Ohio	17,000 00	
208	Vermillion, Ohio	2,000 00	
208	Michigan City, Ind	18,000 00	
208	Chicago, Ill	75,000 00	
208	Calumet, Ill	10,000 00	
209	Waukegan, Ill	5,000 00	
209	Mouth of Cedar River, Michigan	14,000 00	
209	Charlevoix, Mich	1,000 00	
209	Frankfort, Mich	2,000 00	
209	Grand Haven, Mich	8,154 80	
209	Of refuge, Lake Huron, Mich	40,000 00	
209	Ludington, Mich	3,000 00	
209	Manistee, Mich	2,000 00	
209	Marquette, Mich	3,000 00	
209	Muskegon, Mich	5,000 00	
209	New Buffalo, Mich	5,000 00	
209	Ontonagon, Mich	15,000 00	
209	Pentwater, Mich	3,000 00	
209	Portage Lake harbor of refuge, Michigan	10,000 00	
209	Of refuge, Grand Marais, Mich	57,500 00	
209	Saugatuck, Mich	6,000 00	
209	South Huron, Mich	3,000 00	
209	Thunder Bay, Michigan	6,855 22	
209	White River, Mich	4,000 00	
209	Green Bay, Wis	13,000 00	
209	Kewaunee, Wis	7,000 00	
209	Manitowoc, Wis	1,000 00	
209	Menomonee, Wis	13,000 00	
209	Oconto, Wis	17,000 00	
209	Pensaukee, Wis	9,000 00	
209	Port Washington, Wis	1,000 00	
209	Of refuge, Milwaukee Bay, Wisconsin	50,000 00	
209	Racine, Wis	6,000 00	
209	Sheboygan, Wis	22,000 00	
209	Two Rivers, Wis	8,000 00	
209	Of refuge at entrance of Sturgeon Bay Canal, Wisconsin	10,000 00	
209	Dredging Superior Bay, Wisconsin	20 000 00	
210	Muscatine, Iowa	2,500 00	
210	Grand Marais, Minn	18,000 00	
210	Duluth, Minn	15,000 00	
210	Oakland, Cal	145,000 00	
210	Humboldt Harbor and Bay, California	15,000 00	
210	Wilmington, Cal	30,000 00	
210	Yaquina Bay, Oregon	16,000 00	
		2,516,965 03	
	Deduct repayments:		
209	Improving harbor at Au Sable, Mich	$2,900 55	
214	Breakwater and harbor between Straits of Fuca, San Francisco, Cal	1,630 19	
		4,530 74	
	Total expenses improving harbors		2,512,334 29
	Improving rivers.		
210	Royal River, Maine	4,949 40	
210	Lubec Channel, Maine	5,000 00	
210	Moosabec Bar at Jonesport, Me	5,000 00	
210	Cocheco River, New Hampshire	18,000 00	
210	Malden River, Massachusetts	4,000 00	
210	Merrimac River, Massachusetts	2,000 00	
	Carried forward	38,949 40	477,994,340 34

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$929, 588, 337 90
Carried forward	929, 588, 337 90

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.			
	Brought forward	$38,949 40	$477,994,340 34
210	Providence River and Narragansett Bay, Rhode Island	107,026 25	
210	Pawtucket River, Rhode Island	88 80	
210	Connecticut River, Connecticut	28,305 97	
210	ThamesRiver, Connecticut	20,000 00	
210	Removing obstructions in East River and Hell Gate, New York	22,000 00	
210	Hudson River, New York	37,000 00	
210	Newtown Creek, New York	5,000 00	
210	Niagara River, New York	1,000 00	
210	Buttermilk Channel, New York	50,000 00	
210	East Chester Creek, New York	7,000 00	
210	Cheesequakes Creek, New Jersey	14,000 00	
210	Elizabeth River, New Jersey	5,000 00	
210	Passaic River, New Jersey	8,932 62	
210	Passaic River from Pennsylvania railroad bridge to mouth, New Jersey	28,000 00	
210	Rahway River, New Jersey	5,000 00	
210	Raritan River, New Jersey	15,000 00	
210	Raccoon River, New Jersey	7 23	
210	Shrewsbury River, New Jersey	15,000 00	
210	Delaware River below Bridesburg, Pa	84,000 00	
211	Delaware River near Cherry Island Flats, Pennsylvania and Delaware	63,178 42	
211	Frankford Creek, Pennsylvania	2,383 28	
211	North Branch of Susquehanna River, Pennsylvania	5,000 00	
211	Schuylkill River, Pennsylvania	32,087 13	
211	Indian River, Delaware	7,000 00	
211	Corsica Creek, Maryland	5,000 00	
211	Elk River, Maryland	4,000 00	
211	Wicomico River, Maryland	1,000 00	
211	Potomac River, District of Columbia	283,000 00	
211	Blackwater River, Virginia	1,509 64	
211	Appomattox River, Virginia	15,000 00	
211	Archer's Hope River, Virginia	5,000 00	
211	James River, Virginia	55,000 00	
211	Nomini Creek, Virginia	2,000 00	
211	North Landing River, Virginia and North Carolina	2,500 00	
211	New River, Virginia and West Virginia	1,000 00	
211	Monongahela River, West Virginia	11,000 00	
211	Staunton River, Virginia	4,000 00	
211	Totuskey River, Virginia	1,500 00	
211	Pagan Creek, Virginia	55 53	
211	Monongahela River, West Virginia and Pennsylvania	10,000 00	
211	Elk River, West Virginia	2,000 00	
211	Shenandoah River, West Virginia	500 00	
211	Guyandotte River, West Virginia	1,400 00	
211	Great Kanawah River, West Virginia	50,000 00	
211	Cape Fear River from ocean to Wilmington, N. C	130,000 00	
211	Cape Fear River from Wilmington to Fayetteville, N. C	13,500 00	
211	French Broad River, North Carolina	2,000 00	
211	Meherrin River, North Carolina	5,000 00	
211	Neuse River, North Carolina	11,000 00	
211	Pamlico and Tar Rivers, North Carolina	5,000 00	
211	Roanoke River, North Carolina	2,000 00	
211	Trent River, North Carolina	5,000 00	
211	Yadkin River, North Carolina	8,500 00	
212	Santee River, South Carolina	25,000 00	
212	Salkahatchee River, South Carolina	5,000 00	
212	Wateree River, South Carolina	10,000 00	
212	Atamaha River, South Carolina	14,000 00	
212	Chattahoochee River, Georgia	15,000 00	
212	Coosa River, Georgia and Alabama	23,000 00	
212	Flint River, Georgia	5,000 00	
212	Ocmulgee River, Georgia	1,000 00	
212	Oconee River, Georgia	3,500 00	
212	Romerly Marsh, Georgia	9,938 37	
212	Apalachicola River, Florida	2,000 00	
212	Choctawhatchie River, Florida	2,000 00	
212	Caloosahatchee River, Florida	5,000 00	
212	Escambia and Conecuh Rivers, Florida and Alabama	6,000 00	
212	Peas Creek, Florida	4,000 00	
212	Saint John's River, Florida	65,000 00	
212	Alabama River, Alabama	10,000 00	
212	CahabaRiver, Alabama	10,000 00	
212	Tallapoosa River, Alabama	15,000 00	
212	Old Town Creek, Mississippi	3,000 00	
212	Pearl River, Mississippi	6,000 00	
212	Pearl River, below Jackson, Miss	7,000 00	
212	Tombigbee River, Mississippi	1,000 00	
212	Bayou Black, Louisiana	10,500 00	
	Carried forward	1,496,362 64	477,994,340 34

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$929, 588, 337 90
Carried forward	929, 588, 337 90

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.			
	Brought forward	$1,496,362 64	$477,994,340 34
212	Calcasieu Pass, Louisiana	200 00	
212	Calcasieu River	500 00	
212	Red River, Louisiana	40,000 00	
212	Tchefuncta River, Louisiana	2,500 00	
212	Tickfaw River, Louisiana	2,000 00	
212	Bayou La Fourche, Louisiana	3,000 00	
212	Bayou Courtableau, Louisiana	1,000 00	
212	Bayou Teche, Louisiana	1,800 00	
212	Tangipahoa River, Louisiana	2,000 00	
212	Amite River, Louisiana	5,000 00	
212	Connecting Bayou Teche with Grand Lake, Charenton, La	2,000 00	
212	Mouth of Red River, Louisiana	42,428 74	
212	Aransas Pass and Bay, Texas	15,000 00	
212	Buffalo Bayou, Texas	25,000 00	
212	Mouth of Brazos River, Texas	15,000 00	
212	Pass Cavallo, Texas	60,000 00	
212	Arkansas River, Arkansas and Kansas	16,000 00	
212	Black River, Arkansas and Missouri	4,000 00	
212	Saline River, Arkansas	2,000 00	
212	White River above Buffalo Shoals, Arkansas	3,000 00	
212	White and Saint Francis Rivers, Arkansas	2,000 00	
212	Sabine Pass, Texas	120,087 00	
213	Caney Fork River, Tennessee	4,000 00	
213	Clinch River, Tennessee	1,500 00	
213	Cumberland River above Nashville, Tenn	9,000 00	
213	Cumberland River below Nashville, Tenn	2,000 00	
213	Little Tennessee River, Tennessee	3,500 00	
213	Obey's River, Tennessee	5,000 00	
213	Tennessee River below Chattanooga, Tennessee and Alabama	25,000 00	
213	Operating and care of Louisville and Portland Canal, Kentucky	47,500 00	
213	Big Sandy River, Kentucky	31,546 71	
213	Kentucky River, Kentucky	40,584 68	
213	Tradewater River, Kentucky	3,500 00	
213	Ohio River	75,827 46	
213	Rocky River, Ohio	1,390 00	
213	White River, Indiana	5,000 00	
213	Wabash River, Indiana and Illinois	20,000 00	
213	Illinois River, Illinois	200,000 00	
213	Mississippi River	1,946,537 49	
213	Upper Mississippi River	4,000 00	
213	Reservoirs headwaters Mississippi River	225,343 30	
213	Dry-dock at Des Moines Rapids Canal, Mississippi River	18,000 00	
213	Mississippi River above Falls of Saint Anthony, Minnesota	4,000 00	
213	Mississippi River from Saint Paul to Des Moines Rapids, Minnesota, Iowa, Illinois, and Missouri	70,000 00	
213	Des Moines Rapids, Mississippi River, Iowa and Illinois	11,500 00	
213	Operating and care Des Moines Rapids Canal, Iowa and Illinois	47,000 00	
213	Mississippi, Missouri, and Arkansas Rivers	48,000 00	
213	Mississippi River at Quincy, Ill	7,000 00	
213	Rock Island Rapids, Mississippi River, Missouri and Illinois	2,000 00	
213	Mississippi River opposite Saint Louis	20,000 00	
213	Examinations and surveys, South Pass, Mississippi River	9,359 67	
213	Gauging the waters of the Lower Mississippi River and its tributaries	2,100 00	
213	Mississippi River Commission	150,000 00	
213	Constructing jetties and other works at South Pass, Mississippi River	150,000 00	
213	Missouri River from its mouth to Sioux City, Iowa	220,000 00	
213	Missouri River from Sioux City, Iowa, to Fort Benton, Mont	43,000 00	
214	Survey of Missouri River from its mouth to Fort Benton, Mont	2,500 00	
214	Gasconade River, Missouri	500 00	
214	Grand River, Michigan	8,000 00	
214	Operating and care Saint Mary's Falls Canal, Michigan	34,681 63	
214	Operating and care Saint Clair Flats Canal, Michigan	3,495 49	
214	Hay Lake Channel, Sault Sainte Marie River, Michigan	100,414 00	
214	Saginaw River, Michigan	104,000 00	
214	Chippewa River at Yellow Bank, Wis	17,000 00	
214	Fox and Wisconsin Rivers, Wisconsin	50,000 00	
214	Constructing dam at Goose Rapids, Red River of the North, Minnesota and Dakota	2,500 00	
214	Red River of the North, Minnesota and Dakota	4,000 00	
214	Saint Croix River below Taylor's Falls, Minnesota and Wisconsin	8,000 00	
214	Yellowstone River, Montana and Dakota	2,600 00	
214	Lower Clearwater River, Idaho	3,000 00	
214	Sacramento and Feather Rivers, California	15,000 00	
214	San Joaquin River, California	20,000 00	
214	Petaluma Creek, California	2,000 00	
214	Constructing canal around Cascades of Columbia River, Oregon	50,000 00	
214	Upper Columbia River, Oregon	4,000 00	
	Carried forward	5,745,758 81	477,994,340 34

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$929, 588, 337 90
Carried forward	929, 588, 337 90

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.				
	Brought forward		$5,745,758 81	$477,994,340 34
214	Lower Willamette and Columbia Rivers, Oregon		5,000 00	
214	Chehalis River, Washington Territory		1,000 00	
214	Skagit, Steilaquamish, Nooksack, Snohomish, and Snoqualmie Rivers, Washington Territory		6,500 00	
214	Testing flume invented by M. J. Adams		4,000 00	
214	Examinations and surveys and contingencies of rivers and harbors		78,384 36	
215	Surveys of northern and northwestern lakes		6,200 00	
213	Survey for Hennepin Canal		1,000 00	
215	Removing sunken vessels or crafts obstructing or endangering navigation		28,857 50	
			5,876,700 67	
	Deduct repayments:			
210	Improving Salem River, New Jersey	$1,490 66		
210	Improving Woodbury Creek, New Jersey	49 69		
211	Improving Broadkiln River, Delaware	77 58		
211	Improving Saint Jones River, Delaware	382 10		
211	Improving Little Kanawha River, West Virginia	2,131 39		
			4,131 42	
	Total expenses improving rivers			5,872,569 25
	Signal Service.			
216	Pay		207,931 92	
216	Subsistence		160,004 78	
216	Regular supplies		57,042 52	
216	Incidental expenses		1,475 00	
216	Transportation		18,342 59	
217	Barracks and quarters		85,908 00	
217	Clothing and camp and garrison equipage		8,141 80	
217	Medical Department		3,449 21	
216	Signal Service		4,711 99	
217	Observation and report of storms		218,480 29	
217	Obervation and explorations in the Arctic Seas		13,000 00	
218	Construction, maintenance, and repairs of military telegraph lines		32,019 16	
	Total expenses Signal Service			810,507 26
	Miscellaneous.			
215	Army depot building, Saint Paul, Minn		23,500 00	
215	Survey of Gettysburg battle-field		8,000 00	
215	Geographical survey of territory of United States west of the one hundredth meridian		1,999 70	
215	Contingencies of the Army		19,298 34	
215	Publication of the Official Records of the War of the Rebellion		37,416 51	
215	Expenses of recruiting		95,832 27	
216	Expenses of Commanding General's Office		1,588 89	
216	Contingencies of the Adjutant-General's Office		2,496 95	
217	Expenses of military convicts		7,218 53	
218	Artillery School at Fortress Monroe, Va		3,000 00	
	Support of—			
218	National Home for Disabled Volunteer Soldiers		1,122,088 03	
218	Soldiers' Home		355,439 91	
218	Soldiers' Home permanent fund		126,600 00	
218	Soldiers' Home interest account		3,494 75	
218	Military prison at Fort Leavenworth, Kansas		93,412 25	
218	Military posts		200,000 00	
218	Military posts for protection of Rio Grande frontier		71,419 32	
218	Reimbursing State and citizens of California for expenses in suppressing Modoc Indian hostilities		261 01	
218	Claims for quartermaster stores and commissary supplies		2,605 08	
	Relief of—			
219	Kirk W. Noyes		514 75	
219	T. J. Boyles, administrator estate of M. Radish, deceased		440 00	
219	Sufferers from overflow of Ohio River and its tributaries		327,262 96	
219	Sufferers from overflow of Mississippi River and its tributaries		170,000 00	
219	Sallie A. Spence		100 00	
219	M. J. Kelly, late Chaplain United States Army, and others of Company B, Twentieth United States Infantry		53 27	
219	Santiago de Leon		2,988 00	
			2,677,030 52	
	Deduct repayments:			
215	Building for military headquarters, Fort Snelling, Minnesota	$0 43		
215	Buildings for military headquarters, Fort Leavenworth, Kansas	1 05		
	Carried forward	1 48	2,677,030 52	484,677,416 85

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$929, 588, 337 90
Carried forward	929, 588, 337 90

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.				
	Brought forward	$1 48	$2,677,030 52	$484,677,416 85
218	Construction of a post on North Fork of Loupe River, Nebraska	3 00		
218	Construction of military post on Yellowstone and Musselshell Rivers	9 50		
219	Claims of loyal citizens, &c	100 00		
			113 98	
	Total expenses miscellaneous			2,676,916 54
	NAVAL ESTABLISHMENT.			
219	Pay of the Navy		7,003,978 99	
220	Pay miscellaneous		262,372 86	
221	Contingent		113,804 92	
240	General account of advances		588,604 56	
222	Accrued mileage, Navy and Marine Corps		214 78	
	Total expenses Pay Department			7,968,976 11
	Marine Corps.			
222	Pay		633,756 15	
222	Provisions		62,150 38	
222	Clothing		71,800 04	
223	Fuel		18,199 19	
223	Military stores		9,112 47	
223	Transportation and recruiting		9,745 68	
223	Repairs of barracks		9,845 95	
223	Forage for horses		2,977 55	
223	Contingent		24,346 65	
	Total expenses Marine Corps			841,934 06
	Bureau of Yards and Docks.			
223	Marine Barracks, Washington, D. C		9 29	
230	Maintenance		203,470 55	
230	Contingent		19,115 71	
231	Civil establishment		23,979 42	
231	Naval station and coal depot, Port Royal, S. C		500 00	
231	Site for station and coal depot, Port Royal, S. C		5,000 00	
231	Naval training station, Coaster's Island Harbor, R. I		38,944 44	
231	Navy-yard, Brooklyn, N. Y		103,408 97	
231	Navy-yard, Washington, D. C		14,938 11	
231	Navy-yard, Mare Island, Cal		260,634 21	
231	Naval wharf, Key West, Fla		3,011 43	
232	Closed navy-yards and stations		49,899 39	
232	Repairs and preservation at navy-yards		148,095 91	
			871,007 43	
	Deduct excess of repayments:			
231	Navy-yard, New London, Conn	$112 70		
231	Navy-yard, Pensacola, Fla	399 22		
232	Naval Asylum, Philadelphia, Pa	599 97		
			1,111 89	
	Total expenses Bureau of Yards and Docks			869,895 54
	Bureau of Navigation.			
223	Naval Academy:			
223	Pay of professors and others		52,567 25	
223	watchmen and others		23,062 50	
223	mechanics and others		14,590 05	
223	steam employés		7,570 15	
223	Repairs		21,000 00	
223	Heating and lighting		17,000 00	
224	Library		2,000 00	
224	Stationery		2,000 00	
224	Board of Visitors		1,491 75	
224	Chemistry		2,500 00	
224	Miscellaneous		34,600 00	
224	Stores		800 00	
224	Material		1,000 00	
224	Ocean surveys		7,106 91	
224	Navigation and navigation supplies		103,064 30	
224	Civil establishment		4,954 54	
224	Contingent		4,306 93	
225	Hydrographic work		4,274 94	
225	Copper-plates, Hydrographic Office		9,031 10	
225	Survey of west coast of Mexico, Hydrographic Office		2,280 80	
225	Naval Observatory		561 24	
	Carried forward		315,762 46	497,035,139 10

General account of the receipts and expenditures of the United States, &c —Continued.

TO RECEIPTS.

Brought forward	$929,588,337 90
Carried forward	929,588,337 90

General account of the receipts and expenditures of the United States, &c.—Continued.

BY EXPENDITURES.

Page.				
	Brought forward	$315,762 46	$497,035,139 10	
225	Lighting vessels by electricity	5,000 00		
225	Observation of the transit of Venus	13,989 33		
225	Velocity of light, Nautical Almanac	564 80		
		335,316 59		
	Deduct repayment:			
225	Charts of Pacific Coast of Mexico, Hydrographic Office	2 29		
	Total expenses Bureau of Navigation		335,314 30	
	Bureau of Medicine and Surgery.			
225	Naval Laboratory, Washington, D. C	541 18		
232	Medical Department	29,114 50		
233	Museum of Hygiene	2,218 89		
233	Naval hospital fund	77,579 13		
233	Repairs	18,601 56		
234	Contingent	16,188 21		
234	Civil establishment	19,840 52		
	Total expenses Bureau of Medicine and Surgery		164,083 99	
	Bureau of Provisions and Clothing.			
234	Provisions	1,057,202 77		
236	Contingent	5,979 94		
236	Civil establishment	30,803 40		
		1,093,986 11		
	Deduct excess repayments:			
225	Clothing	$118,103 13		
225	Small stores	33,659 19		
		151,762 32		
	Total expenses Bureau of Provisions and Clothing		942 223 79	
	Bureau of Construction and Repair.			
236	Construction and repair	1,353,303 46		
237	Civil establishment	17,022 36		
238	Double-turreted monitors	121,629 70		
228	Steel cruisers	1,278,347 04		
	Total expenses Bureau of Construction and Repair		2,770,302 56	
	Bureau of Steam Engineering.			
237	Steam machinery	1,063,744 19		
238	Contingent	505 75		
238	Civil establishment	9,025 56		
238	Machinery, double-turreted monitors	394,621 01		
227	Testing Clark's deflective turrets	10,311 50		
	Total expenses Bureau of Steam Engineering		1,478,208 01	
	Bureau of Ordnance.			
225	Ordnance and ordnance stores	171,702 74		
226	Contingent	3,862 39		
227	Civil establishment	4,990 67		
227	Repairs	17,499 79		
227	Torpedo corps	77,919 34		
227	Sale of small arms	8,793 66		
228	Steel rifled breech-loading guns	31,357 50		
	Total expenses Bureau of Ordnance		316,126 09	
	Bureau of Equipment and Recruiting.			
228	Equipment of vessels	802,703 14		
229	Transportation and recruiting	34,317 32		
229	Transportation of enlisted men	2,141 11		
229	Contingent	17,849 07		
229	Civil establishment	8,837 05		
230	Recruiting	44 62		
	Total expenses Bureau of Equipment and Recruiting		865,892 31	
	Miscellaneous.			
240	Navy-yards commission	1,225 20		
229	Tuition of two naval cadets, Royal Naval College, Greenwich	900 00		
232	Enlistment bounty to seamen	51		
238	Prize-money to captors	7,103 64		
	Carried forward	9,229 35	503,907,290 15	

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$929,588,337 90
	929,588,337 90

General account of the receipts and expenditures of the Unitld States, &c.—Continued.

BY EXPENDITURES.

Page.				
	Brought forward		$9,229 35	$503,907,290 15
238	Preservation of cemeteries in foreign countries		1,089 44	
238	Extra pay of officers and men who served in the Mexican war		1,028 00	
238	Indemnity for lost clothing		1,488 68	
239	Removal and burial of remains of Lieutenant De Long and companions		1,804 21	
239	Payment of Japanese award, act February 22, 1883		11,701 00	
239	Payment to captain and owners of North Star, for rescue of United States steamer Rodgers		20,000 00	
239	Relief of officers and crew of the United States steamer Rodgers		103 32	
239	sufferers by wreck of United States steamer Huron		318 00	
239	Lady Franklin Bay expedition		696,640 55	
239	Expenses in connection with the Arctic Exploring Expedition		913 76	
240	Destruction of clothing and bedding for sanitary reasons		680 06	
			744,996 37	
	Deduct repayments:			
239	Gratuity to machinists in lieu of re-enlistment	$811 50		
237	Propeller for United States steamer Alarm	652 40		
239	Bounty for destruction of enemies' vessels	2,715 02		
239	Search for steamer Jeannette, Arctic expedition	1,172 77		
			5,351 69	
	Total expenses miscellaneous			739,644 68
				504,646,934 83
	Balance in the Treasury June 30, 1884*			424,941,403 07
				929,588,337 90

* This balance includes the amounts deposited with the following States, viz:

Maine	$955,838 25	Georgia	$1,051,422 09
New Hampshire	669,086 79	Alabama	669,086 79
Massachusetts	1,338,173 58	Louisiana	477,919 14
Vermont	669,086 79	Mississippi	382,335 30
Connecticut	764,670 60	Tennessee	1,433,757 39
Rhode Island	382,335 30	Kentucky	1,433,757 39
New York	4,014,520 71	Ohio	2,007,260 34
New Jersey	764,670 60	Missouri	382,335 30
Pennsylvania	2,867,514 78	Indiana	860,254 44
Delaware	286,751 49	Illinois	477,919 14
Maryland	955,838 25	Michigan	286,751 49
Virginia	2,198,427 99	Arkansas	286,751 49
North Carolina	1,433,757 39		28,101,644 91
South Carolina	1,051,422 09		

General account of the receipts and expenditures of the United States, &c.—Continued.

TO RECEIPTS.

Brought forward	$929, 588, 337 90
	929, 588, 337 90

General account of the receipts and expenditures of the Unittd States, &c.—Continued.

BY EXPENDITURES.

Page.				
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Maryland	955,838 25	Michigan	286,751 49
Virginia	2,198,427 99	Arkansas	286,751 49
North Carolina	1,433,757 39		28,101,644 91
South Carolina	1,051,422 09		

RECEIPTS AND EXPENDITURES.

1883–'84.

PAYMENTS FOR SUPPORT OF THE CIVIL LIST.

CIVIL.

SENATE.

Salaries and mileage of Senators, 1884:
To A. G. McCook $256,644 70
F. E. Shober 200,000 00
456,644 70
Deduct repayment:
By F. E. Shober 46,986 20
409,658 50

Salaries and mileage of Senators, 1883:
By F. E. Shober $1,627 94

Salaries, officers and employés Senate, 1884:
To A. G. McCook 175,058 43
F. E. Shober 96,856 37
271,914 80
Deduct repayment:
By F. E. Shober 422 34
271,492 46

Contingent expenses, Senate, stationery and newspapers, 1884:
To A. G. McCook 10,307 96
F. E. Shober 5,192 04
15,500 00

Contingent expenses, Senate, stationery and newspapers, 1883:
To A. G. McCook 174 35
F. E. Shober 145 47
319 82
Deduct repayment:
By F. E. Shober 104 72
215 10

Contingent expenses, Senate, horses and wagons, 1884:
To A. G. McCook 2,608 23
F. E. Shober 1,100 00
3,708 23
Deduct repayment:
By F. E. Shober 208 23
3,500 00

Contingent expenses, Senate, horses and wagons, 1883:
By F. E. Shober $766 29

Contingent expenses, Senate, fuel for heating apparatus, 1884:
To A. G. McCook $1,474 40
F. E. Shober 5,525 60
7,000 00

Contingent expenses, Senate, fuel for heating apparatus, 1883:
By F. E. Shober $17 68

Contingent expenses, Senate, furniture and repairs, 1884:
To A. G. McCook 8,547 25
F. E. Shober 2,000 00
10,547 25
Deduct repayment:
By F. E. Shober 547 25
10,000 00

Contingent expenses, Senate, furniture and repairs, 1883:
To A. G. McCook 4 50
Deduct from repayment:
By F. E. Shober 141 43
Excess of repayment 136 93

Contingent expenses, Senate, packing boxes, 1884:
To A. G. McCook 596 50
F. E. Shober 73 50
670 00

Contingent expenses, Senate, folding documents, 1884:
To A. G. McCook 2,500 00

Contingent expenses, Senate, materials for folding, 1884:
To A. G. McCook 1,621 20
F. E. Shober 3,000 00
4,621 20
Deduct repayment:
By F. E. Shober 121 20
4,500 00

Contingent expenses, Senate, expenses of special and select committees, 1884:
To A. G. McCook 20,870 08
F. E. Shober 40,000 00
Carried forward 60,870 08

1883–'84. CIVIL.

Contingent expenses, Senate, expenses of select and special committees, 1884—Continued.		
Brought forward		$60,870 08
Deduct repayments:		
By A. G. McCook	$2,243 41	
F. E. Shober	8,630 00	
		10,873 41
		49,996 67
Contingent expenses, Senate, expenses of special and select committees, 1883:		
To A. G. McCook		218 50
Deduct repayment:		
By F. E. Shober		8 40
		210 10
Contingent expenses, Senate, miscellaneous items, 1884:		
To A. G. McCook		8,061 51
F. E. Shober		2,000 00
		10,061 51
Deduct repayment:		
By F. E. Shober		61 51
		10,000 00
Contingent expenses, Senate, miscellaneous items, 1883:		
By F. E. Shober	$6 08	
Contingent expenses, Senate, salaries of Capitol police, 1884:		
To A. G. McCook		$18,207 80
Contingent expenses, Senate, Capitol police contingent fund, 1884:		
To A. G. McCook		18 00
Reporting proceedings and debates, Senate, 1884:		
To D. F. Murphy		25,000 00
Expenses of preparing and compiling Congressional Directory, 1884:		
To A. G. McCook		1,200 00
Postage, Senate, 1884:		
To A. G. McCook		200 00
F. E. Shober		100 00
		300 00
Payments to legal representatives of Hon. George S. Houston:		
To A. G. McCook		5,860 60
Payment to Charles L. Jones, messenger, Senate, J. R., June 12, 1884:		
To Charles L. Jones		465 65

HOUSE OF REPRESENTATIVES.

Salaries and mileage of Members and Delegates, House of Representatives, 1884:		
To A. U. Wyman		$1,735,732 31
Deduct repayments:		
By J. E. Halsell	$31 20	
J. R. Leeden	28 80	
R. Warner	52 00	
		112 00
		1,735,620 31
Salaries and mileage of Members and Delegates, House of Representatives, 1883:		
To A. U. Wyman		131,663 50
Deduct repayments:		
By G. R. Black	$305 60	
J. T. Caine	2,744 33	
R. G. Frost	13 69	
		3,063 62
		128,599 88
Salaries, officers and employés, House of Representatives, 1884:		
To D. W. Brown		5,000 00
J. B. Clark, jr		222,000 00
J. K. Edwards		5,000 00
W. B. Lord		5,000 00
J. J. McElhone		5,000 00
E. McPherson		110,359 06
J. H. White		5,000 00
		357,359 06
Contingent expenses, House of Representatives, stationery and newspapers, 1884:		
To J. B. Clark, jr		35,047 72
E. McElhone		14,910 24
		49,957 96
Deduct repayment:		
By E. McPherson		2,457 96
		47,500 00
Contingent expenses, House of Representatives, stationery and newspapers, 1883:		
To E. McPherson		$1 00
Deduct from repayment:		
By E. McPherson		98 11
Excess of repayment		97 11
Contingent expenses, House of Representatives, furniture and repairs, 1884:		
To J. B. Clark, jr		3,333 22
E. McPherson		6,666 78
		10,000 00
Contingent expenses, House of Representatives, furniture and repairs, 1883:		
By E. McPherson	$2,777 68	
Contingent expenses, House of Representatives, fuel for heating apparatus, 1884:		
To J. B. Clark, jr		3,756 72
E. McPherson		6,000 00
		9,756 72
Deduct repayment:		
By E. McPherson		2,756 72
		7,000 00
Contingent expenses, House of Representatives, fuel for heating apparatus, 1883:		
By E. McPherson	$198 53	
Contingent expenses, House of Representatives, materials for folding, 1884:		
To J. B. Clark, jr		4,915 26
E. McPherson		11,102 74
Carried forward		16,018 00

1883-'84. CIVIL.

Contingent expenses, House of Representatives, materials for folding, 1884—Continued.
Brought forward $16,018 00
Deduct repayment:
By E. McPherson..... 18 00
16,000 00

Contingent expenses, House of Representatives, materials for folding, 1883:
By E. McPherson..... $291 33

Contingent expenses, House of Representatives, miscellaneous items, 1884:
To J. B. Clark, jr..... 49,634 68
E. McPherson..... 4,000 00
53,634 68
Deduct repayment:
By E. McPherson..... 1,022 69
52,611 99

Contingent expenses, House of Representatives, miscellaneous items, 1883:
To J. B. Clark, jr..... 340 19
Deduct from repayment:
By E. McPherson..... 379 73
Excess of repayment..... 39 54

Contingent expenses, House of Representatives, packing boxes, 1884:
To E. McPherson..... 2,987 00

Contingent expenses, House of Representatives, cartage, 1884:
To J. B. Clark, jr..... 517 50
E. McPherson..... 82 50
600 00

Contingent expenses, House of Representatives, salaries, Capitol police, 1884:
To J. B. Clark, jr..... 3,083 13
E. McPherson..... 15,216 63
18,299 76

Postage, House of Representatives, 1884:
To J. B. Clark, jr..... 140 00
E. McPherson..... 410 00
550 00

Digest of Contested-Election Cases, House of Representatives:
To E. McPherson..... 1,000 00

Contingent expenses, House of Representatives, uniforms for Capitol police, 1883:
By E. McPherson $1 00

Payment, Henry H. Smith, journal clerk, House of Representatives:
By E. McPherson $500 00

Payment of J. J. McElhone, official reporter, House of Representatives:
To J. J. McElhone..... 1,000 00

Payment to Frank Galt, assistant journal clerk, House of Representatives, J. R., March 3, 1884:
To F. Galt..... 492 00

Payment to widow of Hon. E. W. M. Mackey, act May 1, 1884:
To Victoria A. Mackey..... $5,586 67

Payment to mother of W. F. Pool, act May 1, 1884:
To Elizabeth Pool..... 7,737 66

Payment to widow of T. H. Herndon, act May 1, 1884:
To Mary E. Herndon 8,875 00

Payment to Alex'r. B. Thomas and Wilson Grice, House of Representatives, act May 1, 1884:
To J. B. Clark, jr..... 1,080 00

Payment to widow of Hon. D. C. Haskell:
To Harriet K. Haskell..... 6,715 97

Salary of the President:
To C. A. Arthur..... 50,000 00

Salary of the Vice-President, 1884:
To G. F. Edmunds 3,000 00

Salary of the Vice-President, 1883:
To G. F. Edmunds 991 63

Salaries, Executive Office, 1884:
To W. H. Crook 36,064 00

Salaries, Executive Office, 1883:
By W. H. Crook..... $1,102 96

Contingent expenses, Executive Office, 1884:
To W. H. Crook 8,000 00

Contingent expenses, Executive Office, 1883:
By W. H. Crook..... $4 06

Promoting the efficiency of the civil service:
To W. H. Robertson..... 219 50
D. Sutphen..... 6 10
New York Transfer Co 3 20
E. B. Elliott 566 50
795 30

Preventing the spread of epidemic diseases:
To G. A. Bartlett..... 51,500 00
J. H. Hill..... 743 92
Navy Department 254 21
Treasury Department..... 2,539 74
Western Union Telegraph Co. 8 67
55,046 54
Deduct repayments:
To A. S. Badger $37 00
W. G. Henderson .. 42 00
79 00
54,967 54

Salaries, Civil Service Commission, 1884:
To L. D. Thoman..... 17,300 00

Salaries, Civil Service Commission, 1883:
By L. D. Thoman..... $63 60

Traveling and incidental expenses, Civil Service Commission, 1884:
To L. D. Thoman..... 5,000 00

Traveling and incidental expenses, Civil Service Commission, 1883:
By L. D. Thoman..... $2,025 50

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Salaries, office of Public Printer, 1884:		
To S. P. Rounds		$15,300 00
Contingent expenses, office of Public Printer, 1884:		
To S. P. Rounds		2,000 00
Contingent expenses, office of Public Printer, 1883:		
To S. P. Rounds		197 95
Repairs, Government Printing Office, 1884:		
To S. P. Rounds		12,360 17
Publication of the Tenth Census Reports:		
To J. G. Ditman		27,321 62
Dobler, Mudge & Chapman		1,122 30
R. Hoe & Co		15,946 05
Jessup & Moore Paper Co		13,814 13
R. O. Moorhouse		3,594 24
S. P. Rounds		205,000 00
Train, Smith & Co		15,116 25
S. D. Warren & Co		13,944 65
		295,859 24
Printing Annual Report, 1881, of Commissioner of Agriculture:		
To J. G. Ditman		8,889 53
S. P. Rounds		18,000 00
The Jessup & Moore Paper Co.		1,600 56
		28,490 09
Deduct repayment:		
By S. P. Rounds		804 52
		27,685 57
Printing Annual Report, 1883, of Commissioner of Agriculture:		
To Bulkley, Dunton & Co		1,688 00
J. G. Ditman		2,346 13
A. Balfour		2,353 20
Essex Paper Company		864 00
R. O. Moorhouse		2,210 00
S. P. Rounds		50,000 00
Train, Smith & Co		30,936 69
S. D. Warren & Co		1,829 13
		92,227 15
Publication of information in aid of societies of the Red Cross:		
To R. C. Morgan		950 57
Deduct repayment:		
By R. C. Morgan		43 79
		906 78
Removal and storage of certain materials Government Printing Office, J. R., No. 9, February 6, 1883:		
To S. P. Rounds		2,000 00
Printing and binding third volume of Catalogue, Library, Surgeon-General's Office:		
To office of Public Printer		1,504 85
Public printing and binding, 1884:		
To A. Balfour		132,798 01
Bulkley, Dunton & Co		2,876 60
Crane & Co		487 55
Conrow Brothers		5,963 91
J. G. Ditman		32,714 45
Dobler, Mudge & Chapman		1,036 03
Essex Paper Company		21,561 94
Fairchild Paper Company		8,795 51
Hastings, Todd & Schanck		120 00
Carried forward		206,356 00

Public printing and binding, 1884—Continued.		
Brought forward		$206,356 00
To Jessup and Moore Paper Company		49,353 27
G. McDowell & Co		155 00
R. O. Moorhouse		46,223 45
Morrison, Bare & Cass		970 46
S. P. Rounds		1,928,747 00
Seymour Paper Company		6,803 44
Tileston & Hollingsworth		3,473 28
Train, Smith & Co		26,942 46
S. D. Warren & Co		3,682 95
Winona Paper Company		1,185 25
Woolworth & Graham		19,293 06
		$2,293,185 62
Deduct repayments:		
By D. Eggerts' Sons	$37 35	
Billings, Harbourne & Co	166 35	
L. Frigerio	18 00	
J. Cunningham	2 70	
C. C. Hutchinson	39 90	
S. Newcomb	442 56	
S. P. Rounds	116,506 95	
S. T. Thaxter & Son	9 45	
Treasury Department	2,760 36	
D. Van Nostrand	78 75	
		120,062 37
		2,173,123 25
Public printing and binding, 1883:		
To A. Balfour		20,838 70
Conrad Brothers		1,500 00
Crane & Co		2,530 00
J. G. Ditman		13,994 03
Dobler, Mudge & Chapman		248 50
The Fairchild Paper Company		622 50
Jessup and Moore Paper Company		7,279 49
Megargee Brothers		140 00
R. O. Moorhouse		9,095 73
S. P. Rounds		179,732 00
Seymour Paper Company		3,510 87
Tilleston & Hollingsworth		3,449 08
S. D. Warren & Co		1,410 58
Woolworth & Graham		5,307 05
		249,658 53
Deduct repayments:		
By J. Cunningham	$1 80	
Government Printing Office	3,082 62	
Office of Public Printer	1,005 28	
S. P. Rounds	44,700 86	
E. W. Sturdy	37 55	
Treasury Department	3,015 63	
		51,843 74
		197,814 79
Public printing and binding, 1882:		
To S. P. Rounds		8,083 30
Public printing and binding, 1881 and prior years:		
By S. P. Rounds	$15 70	
Atchison, Topeka and Santa Fé R. R. Co	28 37	
	44 07	
Salaries, Library of Congress, 1884:		
To A. R. Spofford		36,640 00
Increase Library of Congress, 1884:		
To H. H. Dodge		13,000 00

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Contingent expenses Library of Congress, 1884:
To H. H. Dodge $1,500 00

Works of art for the Capitol:
To H. H. Dodge 8,000 00

Publishing historical documents relating to early French discoveries in the Northwest and on the Mississippi (contract):
To P. Margry 1,418 00

Purchase of military papers, maps, &c., of the Count de Rochambeau:
To Marquis de Rochambeau 20,000 00

Purchase of Matthew H. Carpenter, records and briefs in Supreme Court cases:
To Matt. H. Carpenter 8,000 00

Salaries, Botanic Garden, 1884:
To H. H. Dodge 11,700 00

Improving Botanic Garden, 1884:
To H. H. Dodge 10,000 00

Salaries, judges, &c., Court of Claims, 1884:
To J. C. B. Davis 1,504 10
C. D. Drake 4,500 00
A. Hopkins 3,000 00
C. C. Nott 4,500 00
J. Randolph 2,000 00
W. A. Richardson 4,500 00
G. W. Scofield 4,500 00
S. B. Taylor 1,500 00
R. F. Kearney 840 00
L. Welden 2,592 39
29,436 49

Contingent expenses, Court of Claims, 1884:
To A. Hopkins 3,000 00

Contingent expenses, Court of Claims, 1883:
By A. Hopkins $80 78

Reporting decisions, &c., Court of Claims, 1884:
To A. Hopkins 1,000 00

Payment of judgments, Court of Claims, 1884:
To G. A. Abbott 11 00
J. Art 40 27
E. C. Boudinot 3,272 25
Burlington and Missouri R. R. Co 4,477 80
The Chicago, Milwaukee and Saint Paul Rwy. Co 5,315 77
J. W. George 58 00
The Hannibal and Saint Joseph R. R. Co 11,784 30
J. Leonard 107 20
H. G. Leopold 50 50
J. W. Stevens 8,734 84
G. W. Thomas 147 62
33,999 55

Salaries, office Secretary of the Treasury, 1884:
To G. A. Bartlett 494,121 25

Salaries, office Secretary of the Treasury, 1882:
By G. A. Bartlett $669 19

Salaries, office Supervising Architect, 1884:
To G. A. Bartlett $19 420 00

Salaries, office Supervising Architect, 1882:
By G. A. Bartlett $36 95

Salaries, Secret Service Division, 1884:
To T. J. Hobbs 12 980 00

Salaries, Secret Service Division, 1883:
By T. J. Hobbs $247 87

Salaries, office Supervising Surgeon-General Marine Hospital Service, 1884:
To G. A. Bartlett 28,840 00

Salaries, office Supervising Inspector-General Steamboat Inspection Service, 1884:
To G. A. Bartlett 10,140 00

Salaries, office First Comptroller, 1884:
To T. J. Hobbs 83,020 00

Salaries, office First Comptroller, 1883:
By T. J. Hobbs $2,023 70

Salaries, office Second Comptroller, 1884:
To T. J. Hobbs 110,920 00

Salaries, office Second Comptroller, 1883:
By T. J. Hobbs $2,969 35

Additional clerks adjusting accounts of Soldiers' Home:
To T. J. Hobbs 2,000 00
H. L. Wilson 3,000 00
5,000 00

Salaries, office Commissioner of Customs, 1884:
To T. J. Hobbs 51,630 00

Salaries, office Commissioner of Customs, 1883:
By T. J. Hobbs $467 95

Salaries, office First Auditor, 1884:
To T. J. Hobbs 83,410 00

Salaries, office First Auditor, 1883:
By T. J. Hobbs $441 44

Salaries, office Second Auditor, 1884:
To H. L. Wilson 244,690 00

Salaries, office Second Auditor, 1883:
By H. L. Wilson $5,396 69

Salaries, office of the Third Auditor, 1884:
To T. J. Hobbs 228,410 00

Salaries, office of the Third Auditor, 1883:
To T. J. Hobbs 40 22
Deduct from repayment:
By T. J. Hobbs 10,008 84
Excess of repayment 9,968 62

Salaries, office of the Fourth Auditor, 1884:
To T. J. Hobbs 69,390 00

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Salaries, office of the Fourth Auditor, 1883:		
By T. J. Hobbs	$211 27	
Salaries, office of the Fifth Auditor, 1884:		
To T. J. Hobbs		$47,610 00
Salaries, office of the Fifth Auditor, 1883:		
To T. J. Hobbs		55 00
Deduct from repayment:		
By T. J. Hobbs		2,651 13
Excess of repayment		2,596 13
Salaries, office of the Sixth Auditor, 1884:		
To Z. Ellis		174,000 00
B. Lippincott		236,260 53
		410,260 53
Deduct repayment:		
By Z. Ellis		7,550 83
		402,709 70
Salaries, office of the Sixth Auditor, 1883:		
By Z. Ellis	$699 94	
Salaries, office of the Treasurer, 1883:		
To T. J. Hobbs		275,000 00
Salaries, office of the Treasurer, 1883:		
By T. J. Hobbs	$2,945 96	
Salaries, office of the Treasurer, 1884 (national currency reimbursable):		
To T. J. Hobbs		72,060 00
Salaries, office of the Treasurer, 1884 (national currency reimbursable):		
By T. J. Hobbs	$3,359 21	
Salaries, office of the Register, 1884:		
To E. S. Collamer		182,000 00
Salaries, office of the Register, 1883:		
To E. S. Collamer		74 18
Salaries, office of the Light-House Board, 1884:		
To T. J. Hobbs		42,120 00
Salaries, office of the Light-House Board, 1883:		
By T. J. Hobbs	$1,037 85	
Salaries, office of Commissioner of Internal Revenue, 1884:		
To T. J. Hobbs		299,190 00
Salaries, office of Commissioner of Internal Revenue, 1883:		
To T. J. Hobbs		146 14
Deduct from repayment:		
By T. J. Hobbs		1,909 19
Excess of repayment		1,763 05
Salaries, office Commissioner of Internal Revenue (reimbursable) 1884:		
To T. J. Hobbs		2,500 00
Salaries, office Commissioner of Internal Revenue (reimbursable) 1883:		
By T. J. Hobbs	$135 57	
Salaries, Bureau of Statistics, 1884:		
To T. J. Hobbs		$50,500 00
Salaries, Bureau of Statistics, 1883:		
By T. J. Hobbs	$334 15	
Salaries, office of Life-Saving Service, 1884:		
To G. A. Bartlett		32,880 00
Salaries, office of Life Saving Service, 1882:		
By G. A. Bartlett	$3 26	
Salaries, Comptroller of the Currency, 1884:		
To T. J. Hobbs		103,120 00
Salaries, Comptroller of the Currency, 1883:		
By T. J. Hobbs	$557 99	
Salaries, Comptroller of the Currency (national currency reimbursable), 1884:		
To T. J. Hobbs		17,000 00
Deduct repayment:		
By T. J. Hobbs		180 00
		16,820 00
Salaries, Comptroller of the Currency (national currency reimbursable) 1883:		
By T. J. Hobbs	$27 44	
Contingent expenses, Treasury Department, stationery, 1884:		
To W. Ballantyne & Son		23,336 47
Brown & Lockhart		429 77
R. Boyd		18 00
J. J. Chapman		1,051 27
Crane & Co		281 10
S. W. Curriden		4 00
W. A. Davis		309 80
W. H. Dempsey		558 50
J. McE. Drake		1,150 47
R. B. Dovell's Son Manufacturing Company		140 00
J. D. Free, jr		1,179 97
Fairbanks & Co		5 60
Anna Gangewer		200 00
W. H. Germann		546 87
J. R. Gisburne		43 20
C. G. Gooch		6 25
C. C. Hall		130 00
C. C. Hall & Co		44 00
C. C. Haskell		312 95
J. Heineman		372 75
Holyoke Envelope Company		450 02
P. Jones & Co		1,561 80
Koch Sons & Co		880 00
J. Langfeld		761 00
E. D. Lockwood		6,779 26
J. H. Mann		192 80
J. R. Michael		575 00
Morgan Envelope Company		574 06
G. McDowell & Co		3,239 71
W. A. Morse		1 80
Nescohague Manufacturing Company		580 60
National Electric Company		2 37
Paret & Whittington		14 50
Parker, Stearns & Co		5,237 16
C. C. Pursell		45 00
W. H. Porter & Co		73 30
W. H. Porter		3 60
S. Raynor & Co		60 00
R. A. Robbins		771 12
S. H. Roberts & Co		171 84
J. L. Sage		450 00
E. H. Stanton		13 32
J. L. Savage		1,460 00
Carried forward		54,019 23

Contingent expenses, Treasury Department, stationery, 1884—Continued.

Brought forward		$54,019 23
To Sunday Herald		21 22
The Burr Index Company		215 00
The Capital		7 62
The National Republican Company		10 18
The Republic		21 87
C. W. Thorn & Co		8,642 15
Treasury Department		96 77
Z. G. Wilson		45 80
Washington Post Publishing Company		15 60
E. D. Wheeler		97 35
W. A. Wheeler, jr		3,340 81
White, Corbin & Co		6,972 95
G. A. Whitaker		116 30
Wyckoff, Seamans & Benedict		6 75
		73,629 60
Deduct repayments:		
By H. A. Gill	$23 40	
W. B. Morgan	927 78	
Treasury Department	42,025 30	
		42,976 48
		30,653 12

Contingent expenses, Treasury Department, stationery, 1883:

To Adams Express Company	1 00
Aitcheson & Bro	103 41
J. T. Bailey & Co	256 29
A. Baker	103 50
W. Ballantyne & Son	1,145 78
J. J. Chapman	37 10
L. Curry	129 48
W. H. Dempsey	6 00
J. McE. Drake	526 36
J. D. Free, jr	1 35
G. W. Knox	2 70
E. D. Lockwood	387 58
J. H. Mann	32 50
M. Mitchell	464 40
National Republican	22 50
C. W. Schlicht & Co	35 00
A. M. Tanner	3 50
C. W. Thorn & Co	376 25
Z. G. Wilson	61 80
	3,696 50
Deduct from repayment:	
By Treasury Department	3,873 04
Excess of repayment	176 54

Postage, Treasury Department, 1884:

To Post-Office Department, Washington City post-office	20,188 23

Postage, Treasury Department, 1883:

To Washington City post-office	91 51

Postage, to postal union countries, Treasury Department, 1884:

To Washington City post-office	500 00

Contingent expenses, Treasury Department, file-holders and cases, 1883 and 1884:

To G. A. Bartlett	3,000 00

Contingent expenses Treasury Department, file-holders and cases, 1884:

To G. A. Bartlett	7,500 00

Contingent expenses Treasury Department, 1884; investigation of accounts, &c., traveling expenses, 1884:

To G. A. Bartlett	$1,200 00
A. Galloway	75 00
Treasury Department	17 50
M. M. Walbridge	77 00
J. Woodman	130 50
	1,500 00

Contingent expenses Treasury Department, investigation of accounts, &c., traveling, 1883:

To J. P. McIlrath	138 41
Deduct repayment:	
By G. A. Bartlett	138 41

Contingent expenses Treasury Department, binding and newspapers, &c., 1884:

To G. A. Bartlett	2,600 00

Contingent expenses Treasury Department, binding and newspapers, &c., 1883:

By Treasury Department	$1 50

Contingent expenses Treasury Department, binding and newspapers, &c., 1882:

By G. A. Bartlett	$632 02

Contingent expenses Treasury Department, freight telegrams, 1884:

To G. A. Bartlett	3,905 00
Baltimore and Ohio R. R. Co.	95 00
	4,000 00

Contingent expenses Treasury Department, rent, 1884:

To G. A. Bartlett	9,000 00

Contingent expenses Treasury Department, rent, 1882:

By G. A. Bartlett	$75 00

Contingent expenses Treasury Department, horses and wagons, 1884:

To G. A. Bartlett	5,000 00

Contingent expenses Treasury Department, 1882:

By G. A. Bartlett	$193 60

Contingent expenses Treasury Department, ice, 1884:

To G. A. Bartlett	4,000 00

Contingent expenses Treasury Department, fuel, &c., 1884:

To G. A. Bartlett	13,993 46
Treasury Department	6 54
	14,000 00

Contingent expenses Treasury Department, fuel, &c., 1883:

By Treasury Department	$7 00

Contingent expenses Treasury Department, fuel, &c., 1882:

By G. A. Bartlett	$22 41

Contingent expenses Treasury Department, gas, &c., 1884:
To W. H. Bailey $495 62
G. A. Bartlett 13,490 38
S. C. Ford 14 00
14,000 00

Contingent expenses, Treasury Department, gas, &c., 1883:
By Treasury Department $2 52

Contingent expenses, Treasury Department, carpets and repairs, 1884:
To G. A. Bartlett 8,000 00

Contingent expenses, Treasury Department, furniture, &c., 1884:
To G. A. Bartlett 20,000 00

Contingent expenses, Treasury Department, furniture, &c., 1883:
By Treasury Department $250 55

Contingent expenses, Treasury Department, furniture, &c., 1882:
By G. A. Bartlett $138 98

Contingent expenses, Treasury Department, miscellaneous items, 1884:
To G. A. Bartlett 10,000 00
Treasury Department 42 87
Vincent & Co 25 25
10,068 12
Deduct repayment:
To G. A. Bartlett 68 12
10,000 00

Contingent expenses, Treasury Department, miscellaneous items, 1883:
To Treasury Department 28 75
Deduct from repayments:
By G. A. Bartlett $28 75
Treasury Department 33 39
62 14
Excess of repayment 33 39

Expenses of the national currency, 1884:
To T. J. Hobbs 20,000 00
The Chesapeake and Potomac Telegraph Company 56 25
20,056 25
Deduct repayment:
By T. S. Hobbs 75 00
20,981 25

Expenses of the national currency, 1883:
To Treasury Department 8,986 10
Deduct repayment:
By Secretary of the Treasury 5,350 00
3,636 10

Distinctive paper for United States securities, 1884:
To T. J. Hobbs 35,660 37
Deduct repayment:
By Treasury Department 660 37
35,000 00

Redemption of worn and mutilated United States notes, 1883:
To Adams Express Company $12,421 32
Baltimore and Ohio R. R. Co .. 161 80
12,583 12

Redemption of worn and mutilated United States notes, 1882:
To Adams Express Company 971 00
Deduct repayment:
By G. A. Bartlett 2 20
968 80

Transportation of silver coin:
To Adams Express Company 13,282 53

Recoinage of gold and silver coins, 1883:
To Treasurer United States 1,049 52

Examinations of national banks and bank-plates, 1884:
To T. J. Hobbs 500 00

Examinations of national banks and bank-plates, 1883:
By T. J. Hobbs $208 35

Collecting statistics relating to commerce, 1884:
To T. J. Hobbs 2,000 00

Collecting statistics relating to commerce, 1883:
To T. J. Hobbs 3,675 04
Deduct repayment:
By T. J. Hobbs 344 32
3,330 72

Plans for public buildings, 1884:
To G. A. Bartlett 3,000 00
Deduct repayments:
By M. E. Bell $152 25
T. L. Casey 179 88
G. W. Evans 37 75
J. G. Hill 62 50
Treasury Department 1,566 22
1,998 60
1,001 40

Plans for public buildings, 1883:
To G. A. Bartlett 875 78
Deduct repayments:
By J. G. Hill $212 13
Treasury Department 14 40
226 53
649 25

Plans for public buildings, 1882:
By Treasurer United States $50 75

Vaults, safes, and locks for public buildings, 1884:
To G. A. Bartlett 50,000 00

Vaults, safes, and locks for public buildings, 1883:
To G. A. Bartlett 25,000 00

Suppressing counterfeiting and other crimes, 1884:
To J. H. Robinson 60,000 00
Treasury Department 123 05
60,123 05

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Suppressing counterfeiting and other crimes, 1883:		
To J. H. Robinson	$1,647 53	
Treasury Department	34 73	
	1,682 26	
Deduct repayment:		
By J. H. Robinson	538 81	
	1,143 45	
Lands and other property of the United States, 1884:		
To W. Elmes	165 00	
T. J. Hobbs	550 00	
	715 00	
Lands and other property of the United States, 1883:		
To Chicago Herald	25 50	
T. English	19 57	
Hitchcock & Clark	14 40	
T. J. Hobbs	7 65	
	67 12	
Deduct repayment:		
By T. J. Hobbs	67 12	
Lands and other property of the United States, 1882:		
To B. F. Williams	5 00	
Propagation of food-fishes, 1884:		
To Central Pacific R. R. Co	37 06	
H. A. Gill	170,500 00	
T. J. Hobbs	10,000 00	
Kansas Pacific Rwy. Co	88 97	
Union Pacific R. R. Co	552 30	
	181,178 33	
Propagation of food-fishes, 1883:		
To Central Pacific R. R. Co	299 26	
Kansas Pacific Rwy. Co	8 30	
	307 56	
Deduct repayment:		
By T. J. Hobbs	8 30	
	299 26	
Illustration for report on food-fishes, 1884:		
To H. A. Gill	1,000 00	
Steam vessels, food-fishes:		
To T. J. Hobbs	10,000 00	
Fish Commission's buildings, Wood's Holl, Mass.:		
To T. J. Hobbs	25,000 00	
Expenses of inquiry respecting food-fishes, 1884:		
To H. A. Gill	3,500 00	
Salaries and expenses of members National Board of Health, 1884:		
To S. M. Bemis	1,018 40	
J. M. Brown	53 76	
J. L. Cabell	1,979 65	
W. P. Dunwoody	5,000 00	
H. A. Johnson	141 75	
National Board of Health	1,540 00	
C. Smart	57 25	
S. Smith	30 00	
T. S. Verdi	20 00	
G. E. Waring, jr	1,770 15	
	11,610 96	
Deduct repayment:		
By W. P. Dunwoody	2,455 86	
	9,155 10	

Salaries and expenses of National Board of Health:		
To W. P. Dunwoody	$1,011 82	
Deduct from repayment:		
By W. P. Dunwoody	26,375 29	
Excess of repayment:	25,363 47	
Salaries and expenses of National Board of Health, 1883:		
By W. P. Dunwoody	$3,070 44	
Salaries Bureau of Engraving and Printing, 1884:		
To O. V. Cole	26,130 00	
T. J. Hobbs	2,083 85	
	28,213 85	
Deduct repayment:		
By O. V. Cole	2,168 00	
	26,045 85	
Salaries, Bureau of Engraving and Printing, 1883:		
By O. V. Cole	$1,230 80	
Salaries, Bureau of Engraving and Printing, 1882:		
By O. V. Cole	$16 45	
Labor and expenses of engraving and printing, 1884:		
To O. V. Cole	890,000 00	
T. J. Hobbs	43,000 00	
Treasury Department	233 78	
	933,233 78	
Deduct repayments:		
By T. N. Burrill	$3,293 19	
J. W. Campion & Co.	3 00	
Cannon & Co	11 50	
Chief of Bureau of Engraving and Printing	520 69	
O. V. Cole	5,714 25	
Commissioners, District of Columbia	460 80	
Comptroller of the Currency	20,695 00	
G. W. Evans	3,417 80	
J. Eveleth,	27 00	
Hammond & Co	61 25	
G. Hill, jr	1,680 00	
Holman Liver Pad Company	3 00	
Dr. D. Jayne & Son	29 25	
Kidder & Laird	19 30	
E. M. Lawton	548 82	
W. B. Morgan	624 50	
J. E. Nourse	60 00	
Radway & Co	2 70	
G. Talecat	9 00	
Treasury Department	421,910 34	
L. W. Warner & Co.	17 30	
Woolworth & Graham	350 00	
J. H. Zeilin & Co.	2 30	
		459,460 99
		473,772 79
Labor and expenses of engraving and printing, 1883:		
To O. V. Cole		34,607 73
Deduct repayments:		
By O. V. Cole	$132 10	
G. W. Evans	178 85	
Treasury Department	32,482 31	
Carried forward	32,793 26	34,607 73

1883–'84. CIVIL.

Labor and expenses of engraving and printing, 1883—Continued.		
Deduct repayments:		
Brought forward	$32,793 26	$34,607 73
By Woolworth & Graham	560 69	
		33,353 95
		1,253 78
Purchase, &c., Louisville and Portland Canal:		
To T. C. Acton		24,000 00
Expenses, Smithsonian Institution:		
To Smithsonian Institution		42,180 00
Outstanding liabilities:		
To J. H. Aldrich		1 11
A. M. Atwood		358 77
J. Auguste, guardian		30 00
W. B. Averill		25
P. Beverly		24 00
A. Boon and Mary J. Overton		376 06
S. Bowman		100 00
Z. T. Brooks		250 00
D. Burnes		39 60
W. Carder		52 50
F. Cary		53 00
Bethena Crapo		24 00
J. H. Crombie		3 00
Eliza A. Coulston		24 00
Mary Davis		24 00
J. G. Dodge		84 09
Mary A. Dowell		96 00
C. W. Downe		90 00
R. Dygert		14 67
W. A. Elliott		4,042 75
J. J. Falvey		33 54
J. F. Fites		449 89
W. Flora		100 00
J. M. Ford		5 33
C. M. Fouche		9 70
J. George		340 00
J. H. Hanes		12 00
C. Hagner		2 50
H. Hardin		180 67
Hartford and New Haven R. R. Co.		5,177 45
E. J. Hill		12 00
L. Hitchcock		4,120 00
J. A. Holtzclaw		1,094 05
F. Hurst		179 00
J. A. Irwin		447 00
J. Jacobs		27 10
I. A. Jones		209 79
Rachel Jones		26 40
Ka-Kass-Nicht		33 33
G. Keis		406 73
R. T. Kelsey		10 98
J. L. King		6 18
C. W. Kitter		100 00
Leaty Lambkin, administratrix		115 00
Jesse Lee		24 00
A. C. Legg		75 65
M. Long		33 75
B. Lerontie		18 00
T. E. Lloyd		19 70
T. E. and B. F. Lloyd		19 40
E. S. Mallory and brother and administrator		1 33
J. H. Marshall		100 00
C. Mayhew		63 60
Milan Distilling Company		220 80
G. F. Meekings		39 20
E. M. Miner		50 00
Mary M. Mosher		9 50
P. T. Mooney		6 00
Mary A. McAuly		24 00
J. W. McCullough		173 70
T. McDermott		508 79
Carried forward		20,173 86

Outstanding liabilities—Continued.		
Brought forward		$20,173 86
To T. McIlhaney		4,579 40
F. H. Norton		309 15
S. B. Noyes		25 51
Nunnemaker & Allen		11,786 12
J. M. Patton		19
W. Pinegar		164 43
W. E. Preston, guardian		58 00
W. R. Rice		10 00
G. W. Profett		11 42
J. W. Plummer		95 60
J. D. Quick		100 00
Martha Rawles		54 00
Maria U. Roth		30 00
W. A. E. Rhodes		45 00
Mary Rowan		36 00
P. Sawyer		2 79
G. W. Sawyer		5 58
S. Scherer		113 79
L. E. Scott		15 67
J. M. Smith		13 74
Y. A. Smith		1,021 53
P. Spain		7 00
H. Spultz		39 25
J. Spurrier		113 36
E. Stoctzar		2 50
J. Summer		444 92
Ellen Sweeney		194 67
Z. Tilden		24 00
M. A. Tinsley		24 00
T. S. Towle		405 00
C. H. Van Allen		100 00
Vancouver Coal Mining and Land Company, Limited		261 00
S. Vermillion		148 75
A. J. Vickers		1 15
Anna Von Hache		60 00
L. Weber		13 50
B. F. Weir		169 87
D. J. Williams		24 00
W. Wilson		103 84
Elizabeth Woodruff		24 00
H. T. Woolen		16 00
		40,828 59
Deduct from repayments:		
By C. J. Allen	$2 20	
J. M. Allen	10 67	
J. N. Allison	1 50	
T. M. Anderson	25 00	
J. C. Audenried	6 00	
C. H. Bartlett	10 00	
A. E. Bates	51 19	
J. H. Baldwin	1 00	
G. W. Beaman	39 00	
A. W. Beard	2 00	
W. H. Bell	60 75	
J. Belger	46 00	
J. S. Billings	12 00	
J. S. Bishop	1 50	
D. T. Boynton	2,028 31	
C. L. Bristol	24 00	
J. P. Canby	50	
R. Campion	1,007 56	
A. B. Carey	613 87	
G. W. Candee	100 00	
S. E. Clark	75 00	
J. T. Clements	119 19	
J. C. Clifford	2 00	
S. Conant	2 75	
N. S. Constable	13 00	
C. R. Coster	343 75	
D. C. Cox	24 00	
T. Cruse	100 00	
M. B. Cushing	4 00	
A. M. Darnell	104 81	
J. J. Dana	13 50	
G. B. Dandy	38 16	
C. M. De Lang	39 00	
L. M. Drury	314 55	
C. P. Eagan	36 00	
L. C. Easton	3,074 38	
Carried forward	8,347 14	40,828 59

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Outstanding liabilities—Continued.		
Deduct from repayments:		
Brought forward.	$8,347 14	$40,828 59
By W. C. Ebert	101 64	
E. Ferguson	1,389 63	
L. C. Forsyth	22 99	
J. L. Fowler	7 00	
D. W. Gooch	262 00	
B. F. Glue	110 80	
A. Hart	24 25	
F. H. Hathaway	26 50	
W. A. Herron	281 73	
T. J. Hobbs	427 95	
E. A. Howard	5 00	
R. H. Isabella	402 00	
F. B. Jones	4 00	
H. W. Jones	47 08	
S. H. Jones	95 70	
T. B. Jones	2 25	
W. A. Jones	1 20	
R. M. Kelly	430 67	
W. R. King	37 19	
E. Knefler	488 00	
D. R. Larned	600 00	
H. W. Lawton	119 11	
J. A. Lawyer	828 88	
J. G. C. Lee	9 90	
L. P. Luckey	3 20	
S. J. McCormick	4 80	
M. C. McDonald	1 07	
G. McGregor	165 47	
W. L. McMillen	412 80	
E. C. Merriman	2 40	
E. A. Merritt	62 35	
J. Miller	3 00	
S. M. Mills	4 17	
J. H. Moore	296 35	
R. C. Morgan	106 01	
L. M. Morrill	24 60	
J. Murphy	6 00	
J. M. Patterson	71 00	
W. H. Payne	115 40	
D. C. Pearson	12 84	
C. A. Phelps	22 67	
J. W. Porter	9 06	
T. L. Poole	328 00	
S. Post	120 00	
H. Prince	8 33	
H. B. Quimby	30 66	
J. Richards	399 55	
A. G. Robinson	1 00	
A. F. Lockwell	87 20	
J. H. Roork	31 00	
E. H. Ruffner	147 25	
S. H. Russell	2 95	
A. Sharp	263 91	
H. G. Sickels	19 70	
A. C. Sweet	538 60	
Treasurer United States	22,913 90	
A. S. Towar	59 06	
T. K. Upham	8 19	
J. Vore	5 56	
R. R. Wallace	83 33	
E. L. Whitford	173 40	
A. T. Wikoff	334 47	
C. I. Wilson	4 42	
D. B. Wilson	152 40	
J. S. Witcher	1,889 43	
L. Woodward	18 01	
		43,016 12
Excess of repayments		2,187 53
Contingent expenses (national currency reimbursable) office of Treasurer:		
To Adams Express Company		70,889 67
Baltimore and Ohio R. R. Co		2,994 39
T. J. Hobbs		500 00
Treasury Department		3,713 09
		78,097 15
Coinage, standard silver dollar:		
To J. Crawford		$15,100 00
Central Pacific R. R. Co		997 04
Gold Stock Telegraph Company		1,011 00
Pope, Cole & Co		5,750 00
Riggs & Co		259 96
Reno & McCan		578 69
A. W. Smyth		23,350 00
A. L. Snowden		90,000 00
		137,046 69
Deduct repayments:		
By A. W. Smyth	$2 18	
Treasurer United States	81 00	
		83 18
		136,943 51
Descriptive catalogue of Government publications:		
To E. D. Appleton		500 00
F. Bryan		36 00
J. C. S. Colby		609 24
W. M. French		292 19
A. P. C. Griffin		501 87
I. Hill		120 00
S. S. Little		104 75
J. T. Loomis		188 12
S. V. Noyes		62 50
B. P. Poore		720 00
H. W. Sadler		300 00
G. W. Seaver		442 62
T. F. Shryock		100 00
E. Warfield		1,351 42
H. L. Wilson		367 18
		5,695 89
Salaries and expenses of special inspectors of foreign steam vessels:		
To American Steam Gauge Company		123 00
T. H. Barrett		616 86
G. A. Bartlett		34,700 00
R. D. Bradley		191 21
R. Cathcart		495 35
Central Pacific R. R. Co		1 72
Chicago, Rock Island and Pacific Rwy. Co		64
M. Conklin		55 37
R. S. DeMott		189 35
P. J. Donohue		49 16
D. Gillespie		75 52
W. Golding		19 40
J. H. Hand		145 36
J. Laughlin		82 12
D. P. McQueen		95 62
S. F. Phillips		365 37
N. Pierce		6 35
Treasury Department		37 29
Union Pacific R. R. Co		2 26
F. S. Washington		206 05
E. Whitney		112 01
G. W. Wilmust		26 04
		37,596 05
Staute of Chief-Justice Marshall:		
To W. W. Story		15,000 00
Payment of surplus, proceeds of bonds sold for direct taxes:		
To Mary Beasley and Mary E. Knox		534 59
O. Bigelow		185 00
J. H. Brinkley		16 12
E. M. Capers		230 01
E. A. Benson		397 23
Estate of J. H. Dunlap		385 35
Estate of Wm. English, sr.		106 85
Carried forward		1,855 15

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Payment of surplus, proceeds of bonds and for direct taxes—Continued.		
Brought forward		$1,855 15
To W. G. Ford		133 17
J. A. Forrest		107 90
W. H. Fowle		367 60
Estate of I. Fripp		460 53
D. F. Goodyear		289 34
J. Graham		661 15
W. H. Grider		611 13
W. J. Jenkins		1,460 72
Estate of C. Johnson		279 67
J. Keith		344 15
G. M. Lewis		745 18
W. W. Lathrop		565 00
Estate of J. Metcalf		641 00
A. McKinley		452 23
T. A. Parran		713 44
Estate of J. F. Page		105 77
C. L. Powell		413 98
Estate of B. A. Putnam		3,214 50
Estate of Ed. Sangster		763 42
D. W. Shanks		311 12
R. W. Spencer		73 84
G. A. Stovall		487 95
A. M. Trezevant		92 56
		15,150 50
To promote the education of the blind:		
To J. H. Barrett		10,000 00
Deduct repayments:		
By Secretary of the Treasury	$5,000 00	
Treasurer United States	5,000 00	
		10,000 00
Books and serials for Government actuary, 1883:		
To G. A. Bartlett		250 00
Polaris report, Smithsonian Institution:		
By T. J. Hobbs	$1 22	
North American Ethnology, Smithsonian Institution:		
To J. S. Brown		1,000 00
Central Pacific R. R. Co		88 00
J. D. McChesney		38,483 00
Union Pacific R. R. Co		54 00
		39,625 00
Reconstructing eastern portion of Smithsonian Institution (S. C.), act March 3, 1883:		
To T. J. Hobbs		30,000 00
Library, Department Treasury, 1884:		
To T. J. Hobbs		500 00
Library, Department Treasury, 1883:		
To W. Britton		2 00
Deduct from repayment:		
By T. J. Hobbs		30 93
Excess of repayment		28 93
Monument to commemorate the battle of Monmouth, N. J.:		
To the Monmouth Battle Association		20,000 00
Monument to mark the birth-place of George Washington:		
To F. J. Keickhoefer		1,000 00
R. C. Morgan		1,207 70
		2,207 70
Monument to Thomas Jefferson, at Monticello, Va.:		
By R. C. Morgan	$1,647 17	
Erection of a monumental column at Yorktown, Va.:		
To W. P. Craighill		$25,000 00
Portrait of the late Benjamin H. Hill:		
To Treasury Department		500 00
Portrait of the late William M. Lowe:		
To Treasury Department		500 00
Portrait of the late Godlove S. Orth:		
To Treasury Department		496 33
Portrait of the late J. T. Updegraff:		
To Treasury Department		498 78
Portrait of the late Robert M. A. Hawk:		
To Treasury Department		578 20
Portrait of the late John W. Shackelford:		
To Treasury Department		554 08
Sinking fund Union Pacific R. R. Co.:		
To A. U. Wyman		1,668,925 00
Sinking fund, Central Pacific R. R. Co.:		
By Central Pacific R. R. Co	$541,800 00	
Trust fund, interest for support of free schools in South Carolina:		
To G. Waterhouse		1,748 00
Expenses incurred under the act relating to Chinese:		
To A. W. Bash		280 55
T. Cain		21 00
C. F. Clapp		15 00
A. McCauley		52 00
A. Matson		52 50
J. Morgan		15 00
Oregon Railway and Navigation Company		58 50
Steamer Evangel		47 25
Steamer W. E. Monroe		14 00
J. F. Sheehan		219 00
W. H. Sears		108 00
E. L. Sullivan		500 00
		1,382 80
Canceling and redeeming stamps, office of Internal Revenue:		
To T. J. Hobbs		11,862 38
Treasury Department		8,137 62
		20,000 00
Mail transportation, Pacific railroads, 1882:		
To Central Pacific R. R. Co		143 41
Union Pacific R. R. Co		14 66
		158 07
Mail transportation, Pacific railroads, 1883:		
To Central Pacific R. R. Co		317,717 84
Kansas Pacific R. R. Co		78,856 33
Union Pacific R. R. Co		509,639 59
Sioux City and Pacific R. R. Co		9,496 46
		915,710 22

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Refunding to national banking associations excess of duty:		
To Brandon National Bank	$100 00	
First National Bank, Malvern, Iowa	6 25	
Stafford National Bank, of Stafford Springs, Conn	50 00	
	156 25	
Relief of E. H. George and H. W. Walker:		
To E. H. George	125 00	
H. W. Walker	250 00	
	375 00	
Payment of decree in case of Spanish ferry-boat Nuestra Señora de Regla:		
To La Campania del Ferro Carril de la Habana a Matanzas	148,203 00	
Salaries office assistant treasurer, Baltimore, Md., 1884:		
To F. M. Darby	21,600 00	
Salaries office assistant treasurer, Baltimore, Md., 1883:		
By F. M. Darby	$26 99	
Salaries office assistant treasurer, Boston, Mass., 1884:		
To M. P. Kennard	36,060 00	
Salaries office assistant treasurer, Chicago, Ill., 1884:		
To J. L. Beveridge	21,364 78	
Salaries office assistant treasurer, Cincinnati, Ohio, 1884:		
To L. Markbreit	15,960 00	
Salaries office assistant treasurer, New York, 1884:		
To T. C. Acton	166,434 36	
Salaries office assistant treasurer, New York, 1883:		
By T. C. Acton	$163 37	
Salaries office assistant treasurer, New Orleans, 1884:		
To P. F. Herwig	14,090 00	
Salaries office assistant treasurer, Philadelphia, 1884:		
To G. Eyster	35,100 00	
Salaries office assistant treasurer, Philadelphia, 1883:		
By G. Eyster	$24 73	
Salaries office assistant treasurer, Saint Louis, Mo., 1884:		
To G. A. Edwards	16,580 00	
Salaries office assistant treasurer, San Francisco, 1884:		
To N. W. Spaulding	28,120 00	
Salaries special agents independent Treasury, 1884:		
To G. A. Bartlett	2,000 00	
Salaries special agents independent Treasury, 1883:		
By G. A. Bartlett	$48 37	
Salaries special agents independent Treasury, 1882:		
By G. A. Bartlett	$73 73	
Checks and certificates of deposits, independent Treasury, 1884:		
To Crane & Co		$1,194 03
Treasury Department		1,805 97
		3,000 00
Checks and certificates of deposits, independent Treasury, 1883:		
To Treasury Department		2,728 35
Contingent expenses independent Treasury, 1884:		
To T. C. Acton		332 00
Adams Express Company		43,412 82
F. J. Babson		3 50
Baker, Sloo & Co		14 00
G. A. Bartlett		7,000 00
A. W. Bash		10 75
J. L. Beveridge		119 90
J. R. Brierly		140 75
Central Pacific R. R. Co		17 89
Chicago, Rock Island and Pacific Rwy. Co		3 58
F. M. Darby		28 70
A. G. Edwards		4,605 00
G. Eyster		96 50
P. F. Herwig		193 60
A. F. Hitchings		4 20
G. A. Johnson		40 80
M. P. Kennard		178 48
L. Markbriet		69 91
C. H. Mallory & Co		139 00
J. Mayhew		1 30
J. D. Merryman		129 35
Pennsylvania Company		3 60
H. Southworth		24 30
N. W. Spaulding		178 45
W. H. Pratt		9 60
S. M. Sawyer		11 00
Star Union Line		3 70
Treasury Department		2,244 81
B. Upton, jr		23 20
Union Pacific R. R. Co		32 82
		59,073 51
Deduct repayments:		
By T. C. Acton	$128 35	
Anglo-Californian Bank, San Francisco	750 00	
G. Eyster	1 50	
P. F. Herring	4 50	
		884 35
		58,189 16
Contingent expenses independent Treasury, 1883:		
To Adams Express Company		7,119 27
M. H. Applegate		1 50
F. J. Babson		5 00
Bell Telephone Company		5 00
J. R. Brierly		22 05
Central Pacific R. R. Co		12 98
Chicago, Rock Island and Pacific Rwy. Co		4 49
A. F. Hitchings		7 12
Hunter & Genslinger		3 00
C. H. Mallory		57 52
J. Mayhew		1 50
J. D. Merryman		41 55
New York Clearing-House Association		390 00
Pennsylvania Company		2 01
W. H. Pratt		75
Scarritt Furniture Company		1 00
Treasury Department		164 67
Union Pacific R. R. Co		15 74
Carried forward		7,855 15

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Contingent expenses independent Treasury, 1883—Continued.		
Brought forward		$7,855 15
Deduct repayments:		
By T. C. Acton	$71 01	
G. Eyster	11 64	
P. F. Herwig	7 70	
M. P. Kennard	79	
A. W. Spaulding	15 41	
		106 55
		7,748 60
Contingent expenses independent Treasury, 1882:		
To Baltimore and Ohio R. R. Co		46
Deduct from repayment:		
By G. A. Bartlett		2,866 89
Excess of repayment		2,866 43
Constructing vaults office assistant treasurer at San Francisco:		
To G. A. Bartlett		149 25
Deduct from repayment:		
By Treasury Department		150 00
Excess of repayment		75
Salaries office of Director of the Mint, 1884:		
To T. J. Hobbs		27,380 00
Salaries office of Director of the Mint, 1883:		
By T. J. Hobbs	$431 53	
Contingent expenses office Director of the Mint, 1884:		
To Adams Express Company		16 80
American Journal of Numismatics		2 00
American Chemical Journal		3 00
J. Anglin & Co		5 00
W. Ballantyne & Son		66 10
R. Beall		92 50
A. Brentano & Co		18 50
Brentano Brothers		1 50
H. C. Burchard		760 49
E. F. Burton		600 00
J. Crawford		200 00
M. B. Carey & Co		9 00
A. D. Cartwright		66 00
Cary & Co		9 00
Central Pacific R. R. Co		72 00
Chisholm & Jordan		4 00
Colorado Central R. R. Co		9 00
F. E. Cutler		121 67
S. J. Cutler		87 37
Commercial and Financial Chronicle		10 20
Dewey & Co		4 00
J. M. Dove		6 45
F. Eckfeldt		16 60
Eimer & Armend		91 55
Eureka Evening Leader		10 00
G. D. Flack		176 00
N. A. Fuller		4 75
F. P. Gross		76 00
C. Grow		100 17
S. C. Hanson		81 70
G. B. Hanna		201 70
R. B. Harrison		200 00
W. J. Healy		110 00
B. Homans		5 00
Idaho Weekly World		3 25
J. R. Ives		8 00
Homans Publishing Company		50
Houghton, Mifflin & Co		1 05
Johnson Brothers		13 50
W. T. Keenan		115 00
G. W. Knox		4 47
E. L. Lambie		30 00
Carried forward		**3,413 82**

Contingent expenses office Director of the Mint, 1884—Continued.	
Brought forward	$3,413 82
To A. M. Lawver	496 00
W. P. Lawver	194 75
E. O. Leech	133 30
W. A. Leonard & Co	3 00
Luttrell & Wine	5 00
M. E. Mann	48 00
Manhattan Fire-Brick Works	48 50
Mining Gazette	3 00
W. H. Morrison	15 00
Oregon Short Line R. R. Co	17 20
W. R. Pope	49 50
R. E. Preston	20 60
H. M. Raynor	300 00
Richards & Co	89 33
Riggs & Co	55 02
W. F. Ryan	11 25
Royce & Marean	2 05
San Francisco Bulletin	12 00
E. R. Scidmore	100 00
Scientific Publishing Company	4 00
H. Silver	300 00
Shipping and Commercial List and New York Price List	9 00
W. A. Skidmore	300 00
G. W. Sterritt	4 00
H. C. Stier	73 14
The Herald Publishing Company of Colorado	3 00
The Publisher of Science	5 00
The Republican Publishing Company	2 00
The Tribune Company	12 00
W. S. Thompson	75 73
H. Troemer	10 50
Union Pacific R. R. Co	14 00
Utah and Northern Rwy. Co	30 10
W. H. Wamsley	125 00
H. Werner	100 00
Whitall, Tatum & Co	75 95
A. R. Williams	28 81
Wyckoff, Seamans & Benedict	2 00
	6,191 55
Contingent expenses office Director of the Mint, 1883:	
To Adams Express Company	9 70
W. H. Bailhache & Co	10 00
C. T. Bellany	2 50
R. Beall	31 00
H. C. Burchard	284 55
Central Pacific R. R. Co	60 00
Chisholm & Jordan	4 00
J. R. Curry	3 00
F. Eckfeldt	15 93
Clague, Wegman, Schlicht & Co	108 00
Enterprise Publishing Co	3 00
Gazette Printing and Publishing Co	2 50
Greene & Brooke	2 50
W. C. Hadley	3 00
W. W. Hayward	5 00
C. J. Hildreth	3 00
L. C. Hughes	3 00
Laird & Marlow	3 00
E. O. Leech	42 25
E. P. Lawyer	55 00
T. E. Picotte	3 00
W. R. Pope	75 00
Republican Publishing Company	2 00
W. F. Ryan	7 50
San Francisco Bulletin Co	12 00
The Park Mining Record	3 00
The Weekly Pinal Drill	5 00
The Tin Cup Miner	3 00
The Tribune Company, Salt Lake City	3 00
Carried forward	**764 43**

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Contingent expenses office Director of the Mint, 1883—Continued.
Brought forward $764 43
To M. H. Wamsley 245 00
The Kansas Pacific R. R. Co. 13 87
The Union Pacific R. R. Co .. 8 63
1,031 93

Deduct repayments:
By E. F. Burton $31 40
H. Silver 295 14
326 54
705 39

Salaries mint at Carson, 1884:
To J. Crawford 29,500 00

Wages of workmen mint at Carson, 1884:
To J. Crawford 54,000 00

Wages of workmen mint at Carson, 1883:
By J. Crawford $5 44

Contingent expenses mint at Carson, 1884:
To J. Crawford 24,000 00
Central Pacific R. R. Co 9 96
Treasury Department 62 97
24,072 93

Contingent expenses mint at Carson, 1883:
To J. Crawford 1 00
Central Pacific R. R. Co 9 46
Chicago, Rock Island and Pacific Rwy. Co 19 86
Empire Line 3 48
Union Pacific R. R. Co 17 55
51 35

Deduct repayment:
By J. Crawford 09
51 26

Salaries, mint at Denver, 1884:
To H. Silver 10,950 00

Wages of workmen, mint at Denver, 1884:
To H. Silver 12,000 00

Contingent expenses, mint at Denver, 1884:
To Savage & Stovell 265 10
Star Union Line 2 52
H. Silver 5,000 00
J. A. Taylor 150 00
5,417 62

Contingent expenses, mint at Denver, 1883:
To Chicago, Rock Island and Pacific Rwy. Co 3 54
Empire Line 7 65
Kansas Pacific R. R. Co 104 28
Missouri Pacific Rwy. Co 54 06
Star Union Line 64 57
Union Pacific R. R. Co 5 18
H. Silver 1,000 00
1,239 28

Deduct repayment:
By H. Silver 254 92
984 36

Salaries, mint at New Orleans, 1884:
To A. W. Smyth $31,950 00

Salaries, mint at New Orleans, 1883:
By A. W. Smyth $1,454 94

Wages of workmen, mint at New Orleans, 1884:
To A. W. Smyth 74,000 00

Wages of workmen, mint at New Orleans, 1883:
By A. W. Smyth $0 72

Contingent expenses, mint at New Orleans, 1884:
To A. W. Smyth 34,804 96
Treasury Department 195 04
35,000 00

Contingent expenses, mint at New Orleans, 1883:
By A. W. Smyth $66 37

Salaries, mint at Philadelphia, 1884:
To A. L. Snowden 41,550 00

Salaries, mint at Philadelphia, 1883:
By A. L. Snowden $76 89

Wages of workmen, mint at Philadelphia, 1884:
To A. L. Snowden 293,000 00

Wages of workmen, mint at Philadelphia, 1883:
By A. L. Snowden $8,062 87

Contingent expenses, mint at Philadelphia, 1884:
To A. L. Snowden 99,527 62
Treasury Department 398 30
99,925 92

Contingent expenses, mint at Philadelphia, 1883:
By A. L. Snowden $0 75

Salaries, mint at San Francisco, Cal., 1884:
To E. F. Burton 43,400 00

Salaries, mint at San Francisco, Cal., 1883:
By E. F. Burton $14 83

Wages of workmen, mint at San Francisco, Cal., 1884:
To E. F. Burton 234,000 00
Deduct repayment:
By E. F. Burton 11,300 00
222,700 00

Wages of workmen, mint at San Francisco, Cal., 1883:
By E. F. Burton $62 66

Contingent expenses, mint at San Francisco, Cal., 1884:
To E. F. Burton 60,995 00
American Tube Works 435 30
The Empire Line 14 87
Treasury Department 67 25
H. K. Van Dusen 70 00
61,582 42

Deduct repayment:
By E. F. Burton 6,200 00
55,382 42

Contingent expenses, mint at San Francisco, Cal., 1883:
To Central Pacific R. R. Co $321 78
Chicago, Rock Island and Pacific Rwy. Co 123 37
The Pennsylvania Company.. 2 59
Treasury Department..... 59 83
Union Pacific R. R. Co 442 61
950 18
Deduct from repayment:
By E. F. Burton..... 12,909 05
Excess of repayment..... 11,958 87

Salaries, assay office, Boisé City, Idaho, 1884:
To N. H. Camp 3,000 00

Wages and contingent expenses, assay office, Boisé City, 1884:
To N. H. Camp..... 4,954 30
N. Dalbanco 32 83
Treasury Department..... 10 61
4,997 74

Wages and contingent expenses, assay office, Boisé City, 1883:
To Central Pacific R. R. Co 31 55

Salaries, assay office at Charlotte, N. C., 1884:
To C. J. Cowles 2,750 00

Wages and contingent expenses, assay office, Charlotte, N. C., 1884:
To C. J. Cowles 2,000 00

Wages and contingent expenses, assay office, Charlotte, N. C., 1883:
By C. J. Cowles..... $549 20

Salaries, assay office at New York, 1884:
To A. Mason..... 39,250 00

Salaries, assay office at New York, 1883:
By A. Mason $148 30

Wages of workmen, assay office, New York, 1884:
To A. Mason..... 23,100 00

Wages of workmen, assay office, New York, 1883:
By A. Mason..... $397 50

Contingent expenses, assay office New York, 1884:
To A. Mason 9,350 00
Treasury Department..... 146 13
9,496 13

Contingent expenses, assay office New York, 1883:
By A. Mason..... $203 82

Salaries, assay office at Saint Louis, Mo., 1884:
To E. C. Jewett 3,500 00

Wages and contingent expenses, assay office at Saint Louis, Mo., 1884:
To E. C. Jewett..... 1,875 00
Treasury Department..... 11 10
1,886 10

Wages and contingent expenses, assay office at Saint Louis, Mo., 1883:
By E. C. Jewett $37 69

Fixtures and apparatus, assay office at Saint Louis, Mo.:
By E. C. Jewett..... $166 07

Parting and refining bullion:
To E. F. Burton..... $145,000 00
Central Pacific R. R. Co 225 82
J. Crawford..... 19,500 00
A. Mason..... 82,000 00
Pope, Cole & Co 3,000 00
A. W. Smyth 34 77
A. L. Snowden 11,100 00
Union Pacific R. R. Co..... 597 92
261,458 51
Deduct from repayments:
By E. F. Burton.....$142,085 33
J. Crawford..... 15,364 74
A. Mason..... 104,765 86
A. W. Smyth 721 25
A. L. Snowden 11,145 92
274,083 10
Excess of repayments.... 12,624 59

Storage of silver:
To Adams Express Company.... 4,188 20
G. A. Bartlett 80,000 00
Treasury Department..... 150 00
84,338 20

Storage of silver dollars:
By G. A. Bartlett $172 65

Contingent expenses, assay office at Helena, 1884:
To R. B. Harrison..... 7,961 02
Treasury Department..... 38 98
8 000 00

Contingent expenses, assay office at Helena, 1883:
By R. B. Harrison..... $1,862 97

Contingent expenses, assay office at Helena, 1883:
To Utah and Northern Rwy. Co. 9 69

Salaries, assay office at Helena, 1884:
To R. B. Harrison..... 7,950 00

Wages of workmen, assay office at Helena, 1884:
To R. B. Harrison..... 12,000 00

Wages of workmen, assay office at Helena, 1883:
By R. B. Harrison..... $98 31

Freight on bullion and coin, mints and assay offices, 1884:
To Adams Express Company.... 8,026 28

Freight on bullion and coin, mints and assay offices, 1883:
To Adams Express Company... 727 75

Salaries, governor, &c., Territory of Arizona, 1884:
To C. G. W. French, chief justice 2,653 84
D. H. Pinney, associate justice 2,752 75
A. W. Sheldon, justice..... 1,755 50
F. A. Tritte, governor..... 2,450 00
H. M. Van Arman, secretary.. 1,800 00
11,412 09

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Salaries, governor, &c., Territory of Arizona, 1883:		
To C. G. W. French	$247 25	
D. H. Pinney	247 25	
A. W. Sheldon	387 36	
F. A. Tritte	650 00	
H. M. Van Arman	450 00	
		1,981 86
Salaries, governor, &c., Territory of Arizona, 1882:		
To J. J. Gosper		79 12
Legislative expenses, Territory of Arizona, 1884:		
To H. M. Van Arman		2,200 00
Legislative expenses, Territory of Arizona, 1882:		
By J. J. Gosper	$79 12	
Contingent expenses, Territory of Arizona, 1884:		
To F. A. Tritte		500 00
Salaries, governor, &c., Territory of Dakota, 1884:		
To W. E. Church		2,752 75
A. J. Edgarton		2,752 75
S. A. Hudson		2,752 75
J. P. Kidder		750 00
N. G. Ordway		1,300 00
C. S. Palmer		609 89
J. H. Teller		1,350 00
		12,268 14
Salaries, governor, &c., Territory of Dakota, 1883:		
To W. E. Church		247 25
A. J. Edgerton		247 25
S. A. Hudson		247 25
J. P. Kidder		247 25
N. G. Ordway		650 00
J. H. Teller		450 00
		2,089 00
Legislative expenses, Territory of Dakota, 1884:		
To J. H. Teller		2,800 00
Legislative expenses, Territory of Dakota, 1883:		
By J. H. Teller	$65 38	
Contingent expenses, Territory of Dakota, 1883:		
To N. G. Ordway		250 00
Salaries, governor, &c., Territory of Idaho, 1884:		
To N. Buck		2,752 75
E. L. Curtis		1,350 00
C. Broderick		255 50
J. N. Irwin		1,300 00
J. T. Morgan		2,752 75
H. E. Prickett		2,497 25
		10,908 25
Salaries, governor, &c., Territory of Idaho, 1883:		
To N. Buck		247 25
J. T. Morgan		247 25
H. E. Prickett		247 25
T. F. Singiser		310 00
		1,051 75
Salaries, governor, &c., Territory of Idaho, 1881 (transfer account):		
To R. A. Sidebotham		90 00

Legislative expenses, Territory of Idaho, 1884:		
To E. L. Curtis		$2,085 00
Legislative expenses, Territory of Idaho, 1883:		
To E. L. Curtis		606 77
Deduct from repayments:		
To E. L. Curtis	$76 35	
T. F. Singiser	1,149 90	
		1,226 25
Excess of repayment		619 48
Legislative expenses, Territory of Idaho, 1881 (transfer account):		
By R. A. Sidebotham	$90 00	
Legislative expenses, Territory of Idaho, 1881 and prior years:		
By R. A. Sidebotham	$153 70	
Contingent expenses, Territory of Idaho, 1884:		
To E. L. Curtis		250 00
Contingent expenses, Territory of Idaho, 1882:		
To J. B. Neil		14 50
Salaries, governor, &c., Territory of Montana, 1884:		
To E. J. Conger		1,994 50
J. S. Crosby		1,950 00
J. Coburn		535 72
W. J. Galbraith		2,752 75
I. D. McCutcheon		772 83
D. S. Wade		2,752 75
J. S. Tooker		1,027 17
		11,785 72
Salaries, governor, &c., Territory of Montana, 1883:		
To E. J. Conger		841 67
W. J. Galbraith		247 25
D. S. Wade		247 25
		1,336 17
Legislative expenses, Territory of Montana, 1884:		
To I. D. McCutcheon		1,000 00
J. S. Tooker		1,000 00
		2,000 00
Deduct repayment:		
By I. D. McCutcheon		429 62
		1,570 38
Legislative expenses, Territory of Montana, 1883:		
To I. D. McCutcheon		2,500 00
J. S. Tooker		1,000 00
		3,500 00
Deduct repayment:		
By I. D. McCutcheon		1,913 29
		1,586 71
Legislative expenses, Territory of Montana, 1880 (transfer account):		
To J. H. Mills		2,271 36
Legislative expenses, Territory of Montana, 1881 (transfer account):		
By J. H. Mills	$2,271 36	
Contingent expenses, Territory of Montana, 1884:		
To J. S. Crosby		500 00

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Salaries, governor, &c., Territory of New Mexico, 1884:		
To S. B. Axtell		$2,752 75
J. Bell		2,752 75
W. Bristol		2,752 75
B. M. Read		375 00
W. G. Ritch		1,350 00
L. A. Sheldon		1,950 00
		11,933 25
Salaries, governor, &c., Territory of New Mexico, 1883:		
To S. B. Axtell		247 25
J. Bell		247 25
W. Bristol		247 25
B. M. Read		125 00
W. G. Ritch		450 00
L. A. Sheldon		650 00
		1,966 75
Legislative expenses, Territory of New Mexico, 1884:		
To W. G. Ricth		16,500 00
Legislative expenses, Territory of New Mexico, 1883:		
To W. G. Ritch		650 00
Legislative expenses, Territory of New Mexico, 1882:		
By W. G. Ritch	$309 24	
Contingent expenses, Territory of New Mexico, 1884:		
To L. A. Sheldon		500 00
Salaries, governors, &c., Territory of Utah, 1884:		
To P. H. Emerson		2,752 75
J. A. Hunter		2,752 75
E. H. Murray		2,600 00
A. L. Thomas		1,800 00
S. P. Twiss		2,752 75
		12,658 25
Salaries, governor, &c., Territory of Utah, 1883:		
To P. H. Emerson		247 25
J. A. Hunter		247 25
E. H. Murray		650 00
S. P. Twiss		247 25
		1,391 75
Legislative expenses, Territory of Utah, 1884:		
To A. L. Thomas		18,000 00
Legislative expenses, Territory of Utah, 1883:		
By A. L. Thomas	$154 89	
Legislative expenses, Territory of Utah, 1882:		
To A. L. Thomas		2,000 00
Contingent expenses, Territory of Utah, 1884:		
To E. H. Murray		500 00
Salaries, governor, &c., Territory of Washington, 1884:		
To R. S. Greene		2,752 75
J. P. Hoyt		2,752 75
W. A. Newell		2,600 00
N. H. Owings		1,350 00
S. C. Wingard		2,752 75
		12,208 25
Salaries, governor, &c., Territory of Washington, 1882:		
To R. S. Green		$247 25
J. P. Hoyt		247 25
N. H. Owings		450 00
S. C. Wingard		247 25
		1,191 75
Legislative expenses, Territory of Washington, 1884:		
To N. H. Owings		22,500 00
Legislative expenses, Territory of Washington, 1882:		
By N. H. Owings	$2,158 86	
Contingent expenses, Territory of Washington, 1884:		
To W. A. Newell		500 00
Salaries governor, &c., Territory of Wyoming, 1884:		
To J. B. Blair		2,752 75
W. Hale		2,600 00
E. S. N. Morgan		1,800 00
S. C. Parks		2,752 75
J. B. Sener		2,060 43
		11,965 93
Salaries governor, &c., Territory of Wyoming, 1883:		
To J. B. Blair		494 50
Legislative expenses Territory of Wyoming, 1884:		
To E. S. N. Morgan		24,590 00
Legislative expenses Territory of Wyoming, 1883:		
By E. S. Morgan	$377 83	
Legislative expenses Territory of Wyoming, 1881 and prior years:		
By E. M. Lee	$593 86	
Contingent expenses Territory of Wyoming, 1884:		
To W. Hale		500 00
Contingent expenses Utah Commission, 1884:		
To A. L. Thomas		15,000 00
Contingent expenses Utah Commission, 1883:		
To A. L. Thomas		7,000 00
Deduct repayment:		
By A. L. Thomas		1,584 56
		5,415 44
Compensation and expenses officers of elections, Utah, 1884:		
To A. L. Thomas		18,000 00
Compensation and expenses officers of elections, Utah, 1883:		
By A. L. Thomas	$2,430 72	
Compensation of Utah Commission, 1884:		
To A. B. Carlton		5,000 00
G. L. Godfrey		5,000 00
A. S. Paddock		5,000 00
J. R. Pettigrew		5,000 00
A. Ramsey		5,000 00
		25,000 00

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Improvement and repairs, District of Columbia, 1884:		
To J. B. Edmonds, J. R. West, and J. G. Lydecker		$530,000 00
Deduct repayment:		
By J. B. Edmonds, J. R. West, and G. J. Lydecker		1,055 18
		528,944 82
Improvement and repairs, District of Columbia, 1882:		
By J. B. Edmonds, J. R. West, and G. J. Lydecker	$495 20	
J. Dent, T. P. Morgan, and W. J. Twining	138 90	
		634 10
Improvement and repairs, District of Columbia, 1880 and 1881:		
By J. Dent, T. P. Morgan, and W. J. Twining	$704 00	
Constructing, repairing, and maintaining bridges, 1884:		
To J. B. Edmonds, J. R. West, and G. J. Lydecker		1,500 00
A. F. Rockwell		2,000 00
		3,500 00
Constructing, repairing, and maintaining bridges, 1883:		
By A. F. Rockwell	$2 13	
J. B. Edmonds, J. R. West, and G. J. Lydecker	23 01	
		25 14
Washington Asylum, District of Columbia (support), 1884:		
To J. B. Edmonds, J. R. West, and G. J. Lydecker		46,320 00
Washington Asylum, District of Columbia (support), 1883:		
By J. B. Edmonds, J. R. West, and G. J. Lydecker	$2,094 55	
Georgetown Almshouse, District of Columbia, 1884:		
To J. B. Edmonds, J. R. West, and G. J. Lydecker		1,800 00
Georgetown Almshouse, District of Columbia, 1883:		
By J. B. Edmonds, J. R. West, and G. J. Lydecker	$13 10	
Hospital for the Insane, District of Columbia, 1884:		
To J. B. Edmonds, J. R. West, and G. J. Lydecker		46,700 00
Columbia Hospital for Women and Lying-in Asylum, District of Columbia, 1884:		
To J. T. Mitchell		7,500 00
C. H. Cragin		7,500 00
		15,000 00
Transportation of paupers and prisoners, District of Columbia, 1884:		
To J. B. Edmonds, J. R. West, and G. J. Lydecker		3,000 00
Transportation of paupers and prisoners, District of Columbia, 1883:		
By J. B. Edmonds, J. R. West, and G. J. Lydecker	$244 83	
Transportation of paupers and prisoners, District of Columbia, 1882:		
By J. B. Edmonds, J. R. West, and G. J. Lydecker	$55 12	
Reform School, District of Columbia, 1884:		
To S. W. Curriden		$29,950 00
Children's Hospital, District of Columbia, 1884:		
To F. B. McGuire		5,000 00
Saint Ann's Infant Asylum, District of Columbia, 1884:		
To E. Relihan		5,000 00
Industrial Home School, District of Columbia, 1884:		
To W. W. Curtis		5,000 00
J. B. Edmonds, J. R. West, and G. J. Lydecker		5,000 00
		10,000 00
National Association for Colored Women and Children, District of Columbia, 1884:		
To L. S. Doolittle		7,000 00
Building, National Association for Colored Women and Children, District of Columbia, 1884:		
To J. B. Edmonds, J. R. West, and G. J. Lydecker		20,000 00
Relief of the poor, District of Columbia, 1884:		
To J. B. Edmonds, J. R. West, and G. J. Lydecker		15,000 00
Women's Christian Association, District of Columbia, 1884:		
To J. M. Chester		5,000 00
Relief of the poor, District of Columbia, 1883:		
By J. R. West, T. P. Morgan, and G. J. Lydecker	$200 00	
J. B. Edmonds, J. R. West, and G. J. Lydecker	130 92	
		330 92
Relief of the poor, District of Columbia, 1882:		
To J. Dent, T. P. Morgan, and W. J. Twining		292 90
Salaries and contingent expenses, offices District of Columbia, 1884:		
To J. B. Edmonds, J. R. West, and G. J. Lydecker		144,263 50
Deduct repayment:		
By J. B. Edmonds, J. R. West, and G. J. Lydecker		138 00
		144,125 50
Salaries and contingent expenses, offices District of Columbia, 1882:		
By J. F. Cook	$10 48	

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Salaries and contingent expenses, offices District of Columbia, 1881:
By Commissioners District of Columbia..... $72 00

Public schools, District of Columbia, 1884:
To J. B. Edmunds, J. R. West, and G. J. Lydecker..... $460,075 00
Deduct repayment:
By J. F. Cook..... 66 53
460,008 47

Public schools, District of Columbia, 1883:
By J. F. Cook..... $66 54
J. R. West, T. P. Morgan, and G. J. Lydecker..... 18 00
84 54

Public schools, District of Columbia, 1882:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 2,540 50
J. Dent, T. P. Morgan, and G. J. Lydecker..... 2 47
J. B. Edmonds, J. R. West, and G. J. Lydecker..... 726 80
J. B. Edmonds, J. R. West, and G. J. Lydecker..... 703 74
J. R. West, T. P. Morgan, and G. J. Lydecker..... 20 60
3,994 11

Buildings and grounds, public schools, District of Columbia, 1883 and 1884:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 70,000 00

Buildings and grounds, public schools, District of Columbia:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 496 01
Deduct from repayment:
By J. B. Edmonds, J. R. West, and G. J. Lydecker..... 716 53
Excess of repayment... 220 52

Buildings and grounds, Washington Asylum, District of Columbia, 1883:
By J. B. Edmonds, J. R. West, and G. J. Lydecker..... $7 49

Metropolitan Police, District of Columbia, 1884:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 301,560 00

Metropolitan Police, District of Columbia, 1883:
By J. B. Edmonds, J. R. West, and G. J. Lydecker..... $144 16

Metropolitan Police, District of Columbia, 1882:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 18 00
J. R. West, T. P. Morgan, and G. J. Lydecker..... 3 36
21 36

Police station-houses, Washington, D. C:
By J. B. Edmonds, J. R. West, and G. J. Lydecker..... $6 62

Fire department, District of Columbia, 1884:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... $101,060 00

Courts, District of Columbia, 1884:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 15,418 00
Deduct repayment:
By Commissioners..... $21 00
J. B. Edmonds, J. R. West, and G. J. Lydecker..... 53 15
74 15
15,343 85

Courts, District of Columbia, 1883:
By Commissioners District of Columbia. $18 75

Courts, District of Columbia, 1882:
To J. R. West, T. P. Morgan, and G. J. Lydecker..... 5 00
Deduct from repayment:
By Commissioners District of Columbia..... 14 25
Excess of repayment... 9 25

Courts, District of Columbia, 1881:
By Commissioners District of Columbia. $1 25

Markets, District of Columbia, 1883:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 200 00
Deduct repayment:
By J. B. Edmonds, J. R. West, and G. J. Lydecker..... 58 33
141 67

Streets, District of Columbia, 1883:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 33,000 00
Deduct repayment:
By J. R. West, T. P. Morgan, and G. J. Lydecker..... 5 00
32,995 00

Streets, District of Columbia, 1882:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 20 00
Deduct from repayment:
By J. Dent, T. P. Morgan, and W. J. Twining..... 324 03
Excess of repayment... 304 03

Streets, District of Columbia, 1884:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 231,880 00
Deduct repayment:
By Commissioners..... 1,304 85
230,575 15

Streets, District of Columbia, 1881:
By J. Dent, T. P. Morgan, and W. J. Twining..... $1,619 52

Health department, District of Columbia, 1884:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 42,780 00

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Health department, District of Columbia, 1883:
To J. B. Edmonds, J. R. West, and G. J. Lydecker $153 96
Deduct from repayments:
By Commissioners District of Columbia. $150 00
J. B. Edmonds, J. R. West, and G. J. Lydecker 113 80
263 80
Excess of repayment... 109 84

Health department, District of Columbia, 1882:
To J. Dent, T. P. Morgan, and W. J. Twining..... 301 04

Interest and sinking fund, District of Columbia, 1884:
To A. U. Wyman..... 1,256,214 08
Deduct repayment:
By appropriation account.....$13,160 00
Commissioners District of Columbia. 31,450 00
44,610 00
1,211,604 08

Miscellaneous expenses, District of Columbia, 1884:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 10,600 00
Deduct repayment:
By J. B. Edmonds, J. R. West, and G. J. Lydecker 2 10
10,597 90

Miscellaneous expenses, District of Columbia, 1883:
By J. B. Edmonds, J. R. West, and G. J. Lydecker $30 00

Miscellaneous expenses, District of Columbia, 1882:
To J. B. Edmonds, J. R. West, and G. J. Lydecker 75 69

Miscellaneous expenses, District of Columbia, 1881:
By J. B. Edmonds, J. R. West, and G. J. Lydecker $63 72

Miscellaneous and contingent expenses, District of Columbia, 1881 and prior years:
By J. F. Cook..... $6 10

Contingent expenses, District of Columbia, 1884:
To J. B. Edmonds, J. R. West, and G. J. Lydecker 2,000 00

Contingent expenses, District of Columbia, 1883:
By J. B. Edmonds, J. R. West, and G. J. Lydecker $206 57

Contingent expenses, District of Columbia, 1882:
To J. Dent, T. P. Morgan, and W. J. Twining 823 85

Water fund, District of Columbia, 1884:
To appropriation account $13,160 00
Commissioners, District of Columbia 31,450 00
J. B, Edmonds, J. R. West, and G. J. Lydecker..... 61,240 50
105,850 50

Water fund, District of Columbia:
To J. B. Edmonds, J. R. West, G. J. Lydecker 900 00
Deduct repayment:
By S. L. Phelps, J. Dent, and W. J. Twining 6 37
893 63

Water mains for protection of Government Printing Office, District of Columbia, 1884:
To J. B. Edmonds, J. R. West, and G. J. Lydecker 1,750 00

Refunding taxes, District of Columbia:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 2,000 00
S. L. Phelps, J. Dent, and W. J. Twining..... 21 73
2,021 73

Telegraph and telephone service, 1884:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 12,440 00

Telegraph and telephone service, 1883:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 1,885 69

Washington Aqueduct, District of Columbia, 1884:
To G. J. Lydecker 20,00 00

Employment of the poor of the District of Columbia in filling up grounds:
By J. B. Edmonds, J. R. West, and G. J. Lydecker..... $38 40

Increasing the water supply of Washington, D. C.:
To G. J. Lydecker..... 312,300 00
National Republican Company..... 611 24
312,911 24

Furniture and fixtures, buildings, Columbia Hospital for Women, 1884:
To J. T. Mitchell 5,000 00

Buildings, Reform School, District of Columbia:
To S. W. Curriden..... 7,500 00

Washington redemption fund, District of Columbia:
To J. B. Edmonds, J. R. West, and G. J. Lydecker..... 757 34
Deduct repayment:
By S. L. Phelps, J. Dent, and W. J. Twining..... 34 77
722 57

Washington special tax fund, District of Columbia:
To J. B. Edmonds, J. R. West, and G. J. Lydecker $8,369 59
S. L. Phelps, J. Dent, and W. J. Twining 13 04
8,382 63
Deduct repayment:
By appropriation account 207 89
8,174 74

Redemption of tax-lien certificates, District of Columbia:
To J. B. Edmonds, J. R. West, and G. J. Lydecker 542 68

Redemption of assessment certificates:
To J. B. Edmonds, J. R. West, and G. J. Lydecker 1,618 88

Payment of legal obligations, District of Columbia, 1879 and 1880:
To J. B. Edmonds, J. R. West, and G. J. Lydecker 291 13
S. L. Phelps, J. Dent, and W. J. Twining 3,170 85
3,461 98
Deduct repayment:
By Commissioners District of Columbia. $36 59
J. Dent, T. P. Morgan, and W. J. Twining 1,292 08
J. F. Cook 4 90
S. L. Phelps, J. Dent, and W. J. Twining 1,309 06
2,642 63
819 35

Redemption of Pennsylvania avenue paving-scrip, act July 8, 1870:
To appropriation account 207 89

Redemption of Pennsylvania avenue paving certificates, act July 19, 1876:
By S. L. Phelps, J. Dent, and W. J. Twining $0 25

New engine-house for engine No. 5:
To J. B. Edmonds, J. R. West, and G. J. Lydecker 2,105 00

St. John's Church Orphanage:
To T. Hyde 1,500 00

Redemption of certain funded indebtedness of District of Columbia, act June 10, 1879:
By A. U. Wyman $281,500 00

Interest on 3.65 bonds, District of Columbia, act June 11, 1878 (judgments), act June 6, 1880:
To Treasurer United States 5,699 34
A. U. Wyman 1,199 83
6,899 17

Salaries Coast and Geodetic Survey, 1884:
To W. B. Morgan 253,450 00

Coast and Geodetic Survey (Eastern division), 1883:
To W. B. Morgan 640 97

Carried forward 640 97

Coast and Geodetic Survey (Eastern division, 1883—Continued.
Brought forward $640 97
Deduct from repayments:
By R. D. Cutts $270 96
W. B. Morgan 548 83
819 79
Excess of repayments 178 82

Coast and Geodetic Survey (Western division), 1883:
To Kansas Pacific R. R. Co 90 45
W. B. Morgan 14 45
Union Pacific R. R. Co 267 70
372 60

Coast and Geodetic Survey (Western division), 1882:
To L. A. Sengteller 2 25

Party expenses Coast and Geodetic Survey:
To Central Pacific R. R. Co 79 93
W. B. Morgan 161,645 00
Union Pacific R. R. Co 105 30
161,830 23

Transcontinental work, Coast and Geodetic Survey, 1884:
To W. B. Morgan 20,000 00
Union Pacific 108 00
20,108 00

Points for State surveys, Coast and Geodetic Survey, 1884:
To W. B. Morgan 16,000 00

Repairs of vessels, Coast Survey, 1884:
To W. B. Morgan 27,000 00

General expenses, Coast and Geodetic Survey, 1884:
To W. B. Morgan 58,095 00
Deduct repayment:
By W. B. Morgan 1,065 00
57,030 00

General expenses, Coast and Geodetic Survey, 1883:
By W. B. Morgan $0 25

Coast Survey, steamer for Pacific coast:
To W. B. Morgan 100,000 00

Publishing observations, Coast and Geodetic Survey, 1884:
To W. B. Morgan 3,000 00

Observations eclipse of the sun:
To Central Pacific R. R. Co 40 99
Union Pacific R. R. Co 29 24
70 23
Deduct from repayment:
By W. B. Morgan 75 24
Excess of repayment 5 01

Salaries, office Secretary of War, 1884:
To E. M. Lawton 111,750 00

Salaries, office Secretary of War, 1883:
By E. M. Lawton $31 16

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Contingent expenses office of Secretary of War, 1883:			
To E. M. Lawton	$1,312 57		
Salaries, office Adjutant-General, 1884:			
To E. M. Lawton	687,900 00		
Salaries, office Adjutant-General, 1883:			
To E. M. Lawton	177 23		
Salaries, office Inspector-General, 1884:			
To E. M. Lawton	3,720 00		
Salaries, office Quartermaster-General, 1884:			
To E. M. Lawton	239,400 00		
Salaries, office Quartermaster-General, 1883:			
By E. M. Lawton	$1,520 13		
Compensation and expenses agents Quartermaster's Department, 1884:			
To E. M. Lawton	29,000 00		
Compensation and expenses agents Quartermaster's Department, 1883:			
To E. M. Lawton	666 39		
Salaries, office of Commissary-General, 1884:			
To E. M. Lawton	43,730 00		
Salaries, office of Commissary-General, 1883:			
By E. M. Lawton	$108 16		
Salaries, office Surgeon-General, 1884:			
To E. M. Lawton	529,800 00		
Salaries, office Surgeon-General, 1883:			
By E. M. Lawton	$851 60		
Salaries, office Surgeon-General, 1881 and prior years:			
By J. R. Roche	$23 34		
Salaries, office of Paymaster-General, 1884:			
To E. M. Lawton	64,440 00		
Salaries, office of Paymaster-General, 1883:			
By E. M. Lawton	$49 11		
Salaries, office of Military Justice, 1884:			
To E. M. Lawton	13,089 00		
Salaries, office of Military Justice, 1883:			
By E. M. Lawton	$16 96		
Salaries, office of Chief of Engineers, 1884:			
To E. M. Lawton	23,240 00		
Salaries, office of Chief of Engineers, 1883:			
By E. M. Lawton	$41 74		
Salaries, office of Chief of Ordnance, 1884:			
To E. M. Lawton	44,842 00		
Salaries, office of Chief of Ordnance, 1883:			
By E. M. Lawton	$98 49		
Salaries, Signal Office, 1884:			
To E. M. Lawton			$49,595 00
Salaries, Signal Office, 1883:			
By E. M. Lawton	$578 41		
Salaries, office Publication of Records of the Rebellion, 1884:			
To E. M. Lawton			34,420 00
Salaries, office Publication of Records of the Rebellion, 1883:			
By E. M. Lawton	$50 13		
Salaries of civil employés in lieu of general-service or detailed enlisted men:			
By E. M. Lawton	$34 43		
Salaries, superintendent War Department Building, 1883:			
By E. M. Lawton	$13 32		
Salaries, superintendent, &c., building corner of Seventeenth and F streets, 1884:			
To E. M. Lawton			5,930 00
Salaries, superintendent, &c., building corner of Seventeenth and F streets, 1883:			
By E. M. Lawton	$15 14		
Salaries, superintendent, &c., building on F street, 1883:			
By E. M. Lawton	$8 98		
Support and medical treatment transient paupers, 1884:			
To Providence Hospital			13,750 00
Support and medical treatment transient paupers, 1883:			
To Providence Hospital			1,250 00
Telegraph to connect the Capitol with the Departments and Government Printing-Office, 1884:			
To A. F. Rockwell			1,000 00
Telegraph to connect the Capitol with the Departments and Government Printing-Office, 1883:			
By A. F. Rockwell	$1 63		
Transportation of reports and maps to foreign countries, 1883:			
By J. Eveleth	$82 31		
Postage, War Department, 1884:			
To Post-Office Department			85,501 26
Postage, War Department, 1883:			
To Post-Office Department			34,611 50
Postage, War Department, 1881 and prior years:			
By J. Pardee	$2 37		
Postage to Postal Union countries, War Department, 1884:			
To E. M. Lawton			2,000 00
Postage to Postal Union countries, War Department, 1883:			
By E. M. Lawton	$100 00		

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Contingent expenses, War Department, 1884:
To E. M. Lawton $50,000 00
Deduct repayment:
By E. M. Lawton 7 50
49,992 50

Salaries employés, Public Buildings and Grounds, 1884:
To A. F. Rockwell 41,960 00

Salaries employés, Public Buildings and Grounds, 1883:
By A. F. Rockwell $55 36

Contingent expenses, Public Buildings and Grounds under chief engineer, 1884:
To A. F. Rockwell 500 00

Rent of office, Public Buildings and Grounds, 1884:
To A. F. Rockwell 900 00

Improvement and care of Public Grounds, 1884:
To A. F. Rockwell 79,000 00

Improvement and care of public Grounds, 1883:
By A. F. Rockwell $232 16

Improvement and care of public grounds, 1882:
To A. F. Rockwell 21 25

Repairs, fuel, &c., Executive Mansion, 1884:
To A. F. Rockwell 33,000 00

Repairs, fuel, &c., Executive Mansion, 1883:
By A. F. Rockwell $0 66

Lighting, &c., Executive Mansion, 1884:
To A. F. Rockwell 15,000 00

Lighting, &c., Executive Mansion, 1883:
By A. F. Rockwell $28 47

Repairs to water-pipes and fire-plugs, 1884:
To A. F. Rockwell 2,500 00

Repairs to water-pipes and fire-plugs, 1883:
By A. F. Rockwell $1 67

Building for State, War, and Navy Departments:
To T. L. Casey 435,000 00

Building for State, War, and Navy Departments, south wing:
By R. C. Morgan $450 66

Furniture and carpets, State, War, and Navy Departments building, 1884:
To E. M. Lawton 10,000 00

Fuel, lights, &c., State, War, and Navy Departments building, 1884:
To H. L. Snyder 34,000 00

Completion of the Washington Monument:
To T. L. Casey 176,000 00

Stationery, War Department, 1884:
To E. M. Lawton $30,000 00
Deduct repayment:
By War Department 1,271 26
28,728 74

Rent of buildings, War Department, 1884:
To E. M. Lawton 39,020 00

Salaries, office of superintendent, State, War, and Navy Departments building, 1884:
To H. L. Snyder 81,600 00

Rent of building, office of Adjutant-General, 1883:
By E. M. Lawton $1,000 00

Contingent expenses, office Paymaster-General, 1883:
By E. M. Lawton $179 16

Contingent expenses, office of Publication of Records of the Rebellion, 1883:
By E. M. Lawton $56 48

Pedestal for statue of Rear-Admiral Samuel Francis Dupont:
To A. F. Rockwell 2,800 00

Contingent expenses, War Department building, 1883:
By E. M. Lawton $82 96

Salaries, office Secretary of the Navy, 1884:
To F. H. Stickney 54,146 22

Salaries, Bureau of Yards and Docks, 1884:
To F. H. Stickney 11,980 00

Salaries, Bureau of Equipment and Recruiting, 1884:
To F. H. Stickney 14,261 62

Salaries, Bureau of Navigation, 1884:
To F. H. Stickney 11,340 00

Salaries, Bureau of Ordnance, 1884:
To F. H. Stickney 7,980 00

Salaries, Bureau of Construction and Repairs, 1884:
To F. H. Stickney 12,159 12

Salaries, Bureau of Steam Engineering, 1884:
To F. H. Stickney 12,290 00

Salaries, Bureau of Provisions and Clothing, 1884:
To F. H. Stickney 17,449 24

Salaries, Bureau of Medicine and Surgery, 1884:
To F. H. Stickney 9,370 45

Salaries, Nautical Almanac, 1884:
To F. H. Stickney 23,000 00

Salaries, office Judge-Advocate-General, U. S. Navy, 1884:
To F. H. Stickney 5,649 15

Salaries, office Judge-Advocate-General, U. S. Navy, 1883:
By F. H. Stickney $0 41

Salaries, Hydrographic Office, 1884:
To F. H. Stickney..... $38,716 05

Salaries, Naval Observatory, 1884:
To F. H. Stickney..... 17,384 13

Salaries, superintendent, &c., Navy Department building, 1883:
By F. H. Stickney..... $0 55

Contingent expenses, Navy Department, 1884:
To F. H. Stickney..... 11,000 00

Miscellaneous expenses, Hydrographic Office, 1884:
To F. H. Stickney..... 12,000 00
Deduct repayments:

By R. W. Allen	$150 35	
S. S. Arnheim	34 34	
J. R. Bartlett	1,079 81	
E. Badenhausen	34 97	
Billings, Harbourne & Co	127 41	
Bliss & Co	99 18	
D. Eggert's Sons	88 80	
L. Frigerio	99 60	
W. C. Higginson	89 35	
C. C. Hutchinson	173 75	
Hydrographic Office	9 37	
F. W. Lincoln	210 63	
W. G. Morris	24 00	
Riggs & Bros	287 09	
Riggs & Co	75 00	
M. Rupp & Co	59 52	
S. Thaxter & Son	73 65	
W. A. Wilson	34 19	
		2,751 01
		9,248 99

Contingent and miscellaneous expenses, Hydrographic Office, 1883:

To Seligman Bros		1,503 42
F. H. Stickney		3,560 70
		5,064 12
Deduct repayments:		
By E. Badenhausen	$6 14	
J. J. Chapman	30 47	
		36 61
		5,027 51

Contingent and miscellaneous expenses, Naval Observatory, 1884:
To F. H. Stickney..... 9,436 00

Library, Navy Department, 1884:
To F. H. Stickney..... 1,500 00

Library, Navy Department, 1883:
By F. H. Stickney..... $336 90

Postage, Navy Department, 1883:
To Post-Office Department..... 45 00

Contingent and miscellaneous expenses, Nautical Almanac Office, 1883:
To F. H. Stickney..... 40 69
Deduct from repayment:
By F. H. Stickney..... 82 84
Excess of repayment..... 42 15

Salaries, Post-Office Department, 1884:

To J. O. P. Burnside		650,000 00
A. U. Wyman		57,616 34
Carried forward		707,616 34

Salaries, Post-Office Department, 1884—Continued.

Brought forward		$707,616 34
Deduct repayments:		
By J. O. P. Burnside		43,792 10
		663,824 24

Salaries, Post-Office Department, 1883:
By J. O. P. Burnside.... $4,336 80

Salaries, Post-Office Department, 1882:
By J. O. P. Burnside.... $874 84

Contingent expenses, Post-Office Department, stationery, 1884:
To J. O. P. Burnside..... 9,000 00

Contingent expenses, Post-Office Department, fuel, 1884:
To J. O. P. Burnside..... 7,200 00

Contingent expenses, Post-Office Department, gas, 1884:
By J. O. P. Burnside..... 5,600 00
Deduct repayment:
By J. O. P. Burnside..... 1,000 00
4,600 00

Contingent expenses, Post-Office Department, plumbing and gas fixtures, 1884:
To J. O. P. Burnside..... 3,700 00
Deduct repayment:
By J. O. P. Burnside..... 1,200 00
2,500 00

Contingent expenses, Post-Office Department, telegraphing, 1884:
To J. O. P. Burnside..... 5,900 00
Deduct repayment:
By J. O. P. Burnside..... 2,000 53
3,899 47

Contingent expenses, Post-Office Department, telegraphing, 1883:
By J. O. P. Burnside.... $0 85

Contingent expenses, Post-Office Department, telegraphing, 1882:
By J. O. P. Burnside.... $1 91

Contingent expenses, Post-Office Department, printing, 1884:
To J. O. P. Burnside..... 4,700 00

Contingent expenses, Post-Office Department, carpets, 1884:
To J. O. P. Burnside..... 5,900 00

Contingent expenses, Post-Office Department, furniture, 1884:
To J. O. P. Burnside..... 6,200 00

Contingent expenses, Post-Office Department, horses and wagons, 1884:
To J. O. P. Burnside..... 1,500 00
Deduct repayment:
By J. O. P. Burnside..... 500 00
1,000 00

Contingent expenses, Post-Office Department, hardware, 1884:
To J. O. P. Burnside..... 1,700 00

Contingent expenses Post-Office Department, miscellaneous items, 1884:
To J. O. P. Burnside $12,000 00
Deduct repayment:
By J. O. P. Burnside 3,000 00
9,000 00

Contingent expenses, Post-Office Department, rent, 1884:
To J. O. P. Burnside 9,500 00

Contingent expenses, Post-Office Department, publication of Official Postal Guide, 1884:
To J. O. P. Burnside 29,000 00

Deficiency in the postal revenues, 1884:
To Post-Office Department 135,941 26
Deduct repayment:
By Post-Office Department 135,941 26

Deficiency in the postal revenues, 1883:
To Post-Office Department 35,465 35
Deduct repayment:
By Post-Office Department 35,465 35

Publication of post-route maps, 1884:
To J. O. P. Burnside 15,000 00

Post-Office Department building, refitting rooms:
By J. O. P. Burnside... $530 37

Salaries, Department of Agriculture, 1884:
To G. B. Loring 127,500 00

Salaries, Department of Agriculture, 1883:
To G. B. Loring..... 175 49

Collecting agricultural statistics, 1884:
To G. B. Loring..... 79,500 00

Purchase and distribution of valuable seeds, 1884:
To G. B. Loring..... 75,000 00

Museum, Department of Agriculture, 1884:
To G. B. Loring..... 1,000 00

Museum, Department of Agriculture, 1883:
To G. B. Loring..... 500 00

Experimental garden, Department of Agriculture, 1884:
To G. B. Loring..... 7,200 00

Laboratory, Department of Agriculture, 1884:
To G. B. Loring..... 16,800 00

Furniture, cases, and repairs, Department of Agriculture, 1884:
To G. B. Loring..... 6,000 00

Library, Department of Agriculture, 1884:
To G. B. Loring..... 1,500 00

Investigating the history of insects injurious to agriculture, 1884:
To G. B. Loring..... 19,000 00
Sioux City and Pacific R.R.Co. 1 94
Union Pacific R. R. Co..... 115 00
19,116 94

Investigating the history of insects injurious to agriculture, 1882 and 1883:
To G. B. Loring..... $288 46
Sioux City and Pacific R.R.Co. 3 30
Union Pacific R. R. Co..... 61 40
353 16

Investigating diseases of domesticated animals, 1884:
To J. Law 871 08
G. B. Loring..... 22,500 00
J. H. Sanders..... 927 33
24,298 41

Investigating the diseases of swine and other domesticated animals, 1883:
To G. B. Loring..... 3,055 73
J. H. Sanders..... 528 55
3,584 28

Reclamation of arid and waste lands:
To Baltimore and Ohio R. R. Co.. 33 50
Kansas Pacific R. R. Co 24 26
G. B. Loring..... 15,838 50
Union Pacific R. R. Co 66 99
15,963 25

Report on Forestry, 1884:
To Chicago, Milwaukee and Saint Paul Railway Company 12 50
G. B. Loring..... 9,892 50
Oregon Railway and Navigation Company..... 95 00
10,000 00

Report on Forestry, 1883:
To Central Pacific R. R. Co 83 04
G. B. Loring 1,679 99
Union Pacific 114 00
1,877 03

Contingent expenses, Department of Agriculture, 1884:
To G. B. Loring..... 13,500 00

Postage, Department of Agriculture, 1884:
To G. B. Loring..... 3,800 00

Postage, Department of Agriculture, 1883:
To G. B. Loring..... 177 49

Improvement of grounds, Department of Agriculture:
To G. B. Loring..... 8,000 00

Experiments in the manufacture of sugar:
To G. B. Loring..... 5,454 60

Building, Department of Agriculture:
To G. B. Loring..... 2,500 00

Experiments in the culture of tea, 1883:
To G. B. Loring..... 505 66

Examination of woods and animal fibers, 1882 and 1883:
To G. B. Loring..... 264 04

Transporting for permanent exhibition certain agricultural and mineral specimens exhibited:
To G. B. Loring..... 600 00

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Salaries, justices, &c., Supreme Court U. S., 1884:		
To S. Blatchford, associate justice	$10,000 00	
J. P. Bradley, associate justice	10,000 00	
S. J. Field, associate justice...	10,000 00	
H. Gray, associate justice ...	10,000 00	
J. M. Harlan, associate justice.	10,000 00	
S. Matthews, associate justice	10,000 00	
J. G. Nicolay, marshal.....	3,000 00	
S. F. Miller, associate justice .	10,000 00	
M. R. Waite, Chief Justice ...	10,500 00	
W. B. Wood. associate justice.	10,000 00	
	93,500 00	
Salaries and expenses, office of Supreme Court, 1883 and 1884:		
To H. C. McKenny	8,000 00	
Salaries of circuit judges, 1884:		
To J. Baxter, Tennessee.....	6,000 00	
H. L. Bond, Maryland.....	6,000 00	
D. J. Brewer	1,384 62	
T. Drummond, Illinois.....	6,000 00	
J. Lowell, Massachusetts	4,994 50	
G. W. McCrary, Iowa	3,989 00	
W. McKennan, Pennsylvania.	6,000 00	
D. A. Pardee, Louisiana	6,000 00	
L. Sawyer, California	6,000 00	
W. J. Wallace, New York ...	6,000 00	
	52,368 12	
Salaries of retired United States judges, 1884:		
To A. Boarman	285 40	
J. Erskine.....	1,750 00	
W. Hunt	10,000 00	
J. P. Knowles	3,500 00	
E. G. Loring.....	4,500 00	
A. Rives	3,500 00	
W. Strong	10,000 00	
N. H. Sawyer.....	9,175 80	
	42,711 20	
Salaries of district judges, 1884:		
To M. W. Acheson, Pennsylvania	4,000 00	
J. W. Barr, Kentucky	3,500 00	
C. L. Benedict, New York....	4,000 00	
E. C. Billings, Louisiana.....	4,500 00	
H. W. Blodgett, Illinois	4,000 00	
E. G. Bradford, Delaware	1,903 85	
A. Brown, New York	4,000 00	
H. B. Brown, Michigan.....	3,500 00	
A. Boarman, Louisiana.....	3,214 60	
J. Bruce, Alabama	3,500 00	
G. S. Bryan, South Carolina..	3,500 00	
R. Bunn, Wisconsin	3,500 00	
W. Butler, Pennsylvania.....	4,000 00	
H. C. Caldwell, Arkansas	3,500 00	
L. B. B. Colt, Rhode Island ..	3,500 00	
D. Clark, New Hampshire ...	3,500 00	
A. C. Coxe, New York	4,000 00	
M. P. Deady, Oregon	3,500 00	
R. P. Dick, North Carolina...	3,500 00	
E. S. Dundy, Nebraska	3,500 00	
C. E. Dyer, Wisconsin	3,500 00	
J. Erskine, Georgia	1,750 00	
C. G. Foster, Kansas	3,500 00	
M. Hallett, Colorado	3,500 00	
E. S. Hammond, Tennessee ..	3,500 00	
R. A. Hill, Mississippi.....	3,500 00	
O. Hoffman, California	5,000 00	
R. W. Hughes, Virginia	3,500 00	
J. J. Jackson, jr., West Virginia	3,500 00	
D. M. Key, Tennessee.....	3,500 00	
A. Krekel, Missouri.....	3,500 00	
J. W. Locke, Maine	3,500 00	
J. M. Love, Iowa	3,500 00	
H. K. McCay, Georgia...	3,500 00	
Carried forward.....	120,868 45	

Salaries of district judges, 1884—Continued.		
Brought forward.....		$120,868 45
To A. P. McCormick, Texas		3,500 00
A. Morrill, Texas		2,673 08
T. J. Morris, Maryland		4,000 00
R. R. Nelson, Minnesota.....		3,500 00
T. L. Nelson, Massachusetts.		4,000 00
J. T. Nixon, New Jersey		4,000 00
I. C. Parker.....		3,500 00
J. Paul.....		2,872 28
G. M. Sabin, Nevada		3,500 00
G. R. Sage, Ohio.....		4,000 00
T. Settle, Florida.....		3,500 00
A. S. Seymour		3,500 00
N. Shipman, Connecticut		3,500 00
O. P. Shiras, Iowa.....		3,500 00
S. H. Treat, Illinois		3,500 00
S. Treat, Missouri.....		3,500 00
E. B. Turner, Texas.....		3,500 00
L. E. Wales		903 85
N. Webb, Maine.....		3,500 00
M. Welker, Ohio		3,500 00
H. H. Wheeler, Vermont.....		3,500 00
S. L. Withey, Michigan.....		3,500 00
W. A. Woods.....		3,500 00
C. B. Sabin		740 35
	200,058 01	
Deduct repayment:		
By Treasurer United States.....		298 10
	199,759 91	
Salaries of district judges, 1883:		
To W. A. Woods.....		519 27
Salaries justices of the supreme court District Columbia, 1884:		
To D. K. Cartter, chief justice ..		4,500 00
W. S. Cox.....		4,000 00
A. B. Hagner		4,000 00
C. P. James		4,000 00
A. MacArthur.....		4,000 00
A. Wylie.....		4,000 00
	24,500 00	
Salaries district attorneys, 1884:		
To J. B. Allen, Washington.....		250 00
J. C. Bigger, Texas		200 00
W. H. Bliss, Missouri		150 00
J. E. Boyd, North Carolina...		200 00
A. W. Brazee, Colorado		200 00
M. C. Brown		204 67
C. H. Burns, New Hampshire.		200 00
H. J. Campbell, Dakota		250 00
D. Chadwick, Connecticut....		200 00
G. C. Chandler, Mississippi..		200 00
E. M. Cheney, Florida.....		200 00
W. H. H. Clayton, Arkansas.		200 00
T. Coffin, Nevada		200 00
J. A. Connelly.....		200 00
G. B Corkhill		106 59
S. M. Cutcheon, Michigan....		200 00
S. A. Darnell, Georgia		200 00
W. H. DeWitt, Montana.....		250 00
N. F. Dixon, jr., Rhode Island		200 00
W. H. Dickson		75 55
G. M. Derskin, Alabama.....		200 00
E. H. Eggleston, Ohio		200 00
M. C. Elstner, Louisiana		200 00
A. J. Evans, Texas		200 00
W. H. H. Flick, West Virginia		200 00
E. Guthridge, Texas		100 00
J. R. Hallowell, Kansas.....		200 00
K. Haskins, Vermont.....		200 00
G. W. Hazelton, Wisconsin...		200 00
S. G. Gilbourn, California		500 00
C. L. Holstein, Indiana.....		200 00
A. Q. Keasbey, New Jersey..		200 00
G. M. Lambertson, Nebraska.		200 00
Carried forward.....		6,686 81

1883–'84. CIVIL.

Salaries, district attorneys, 1884—Continued.		
Brought forward		$6,686 81
To L. Lea, Mississippi		200 00
J. B. Leake, Illinois		100 00
A. H. Leonard, Louisiana		200 00
D. S. Lewis, Virginia		200 00
H. M. Lewis, Wisconsin		200 00
W. F. Lunt, Maine		200 00
A. McClain, Tennessee		200 00
J. M. Meek, Tennessee		200 00
S. W. Meton, South Carolina		200 00
M. D. O'Connell, Iowa		200 00
G. B. Patterson, Florida		200 00
J. C. Patterson, Delaware		200 00
G. Paschel		80 93
W. F. Poston, Tennessee		200 00
G. W. Prichard, New Mexico		250 00
C. Richards, Ohio		200 00
J. A. Riner		45 33
W. S. O. B. Robinson, North Carolina		200 00
E. Root, New York		6,000 00
J. S. Runnells, Iowa		200 00
G. P. Sanger, Massachusetts		200 00
D. B. Searle, Minnesota		200 00
W. H. Smith, Alabama		200 00
E. Speer		200 00
A. Sterling, jr., Maryland		200 00
J. W. Stone, Michigan		200 00
W. A. Stone, Pennsylvania		200 00
A. E. Stratton		26 37
A. W. Tenney		200 00
G. M. Thomas		200 00
M. I. Townsend		200 00
R. S. Tuthill		75 27
J. K. Valentine, Pennsylvania		200 00
P. T. Van Zile, Utah		174 45
E. Waddill, jr., Virginia		200 00
C. C. Waters		200 00
J. F. Watson, Oregon		200 00
W. Warner, Missouri		200 00
W. R. White, Idaho		250 00
A. S. Worthington		84 62
J. A. Zabviski, Arizona		250 00
	20,023 78	
Deduct repayment:		
By J. B. Leake	7 70	
	20,016 08	
Salaries, district attorneys, 1883:		
To W. H. DeWitt		65 97
E. H. Eggleston		59 44
G. W. Prichard		71 53
E. Speer		72 20
	269 14	
Salaries, district attorneys, 1882:		
To W. S. Lurty		40 00
Salaries, district marshals, 1884:		
To H. Allen, Dakota		200 00
G. W. Atkinson, West Virginia		200 00
A. J. Auxier, Kentucky		200 00
E. L. Bierbower, Nebraska		200 00
G. D. Bisbee, Maine		200 00
T. Boles, Arkansas		200 00
A. C. Botkin, Montana		200 00
A. Blythe		100 00
J. H. Coggeshall, Rhode Island		200 00
P. S. Corbett, Nevada		200 00
F. Coste, Missouri		200 00
W. B. Deacon, New Jersey		200 00
H. R. Denny, Minnesota		200 00
M. M. Drew, California		500 00
F. T. DuBois, Idaho		200 00
J. H. Durkee, Florida		200 00
H. Fink, Wisconsin		200 00
Carried forward	3,600 00	

Salaries, district marshals, 1884—Continued.		
Brought forward		$3,600 00
To R. S. Foster, Indiana		200 00
W. G. M. Golsom		7 69
W. F. Goodspeed		200 00
H. L. Gosling, Texas		200 00
W. W. Henry, Vermont		200 00
J. B. Hill, North Carolina		400 00
J. M. Hinds, Alabama		250 00
C. Hopkins, Washington		200 00
R. P. Hughes, Virginia		200 00
E. A. Ireland, Utah		200 00
A. M. Jones, Illinois		150 00
E. S. Kearney		150 00
T. B. Keogh, North Carolina		200 00
J. C. Kinney, Connecticut		200 00
J. H. Livingston, South Carolina		130 39
C. D. MacDougall, New York		200 00
S. S. Mathews, Michigan		200 00
J. H. McGee, Missouri		200 00
J. A. McKee, Texas		200 00
H. H. McMullen, Delaware		200 00
J. Monroe, Michigan		200 00
J. L. Morphis, Mississippi		200 00
A. L. Morrison, New Mexico		200 00
J. N. Patterson, New Hampshire		200 00
G. D. Perkins, Iowa		200 00
W. J. Phillips, Texas		150 00
J. R. J. Pitkin, Louisiana		200 00
F. W. Oakley, Wisconsin		200 00
W. C. Raum, Mississippi		200 00
T. H. Reeves, Tennessee		200 00
R. Root, Iowa		200 00
D. B. Russell, Arkansas		200 00
J. S. Rutan, Pennsylvania		200 00
G. Schnitger, Wyoming		200 00
B. F. Simpson, Kansas		200 00
W. A. Smith, Colorado		200 00
J. H. Speed		13 74
P. Strobach, Alabama		150 00
J. R. Tanner		119 02
A. C. Tate		200 00
Z. L. Tidball, Arizona		200 00
G. N. Tillman, Tennessee		200 00
J. G. Tracy		29 67
T. J. Tuomey		56 59
J. G. Watts, Virginia		200 00
J. C. Weaks, Louisiana		200 00
J. Wheeler, Illinois		50 00
P. A. Williams, Florida		200 00
M. T. Williamson, Tennessee		200 00
L. Wright, Ohio		200 00
	12,657 10	
Salaries, district marshals, 1883:		
To R. M. Douglas, North Carolina		39 44
T. B. Keogh, North Carolina		60 56
J. H. McGee, Missouri		56 11
M. C. Osborn, Alabama		42 22
D. B. Russell, Arkansas		86 82
P. Strobach, Alabama		51 11
J. C. Ullery, Ohio		46 67
L. Wright, Ohio		53 33
	436 26	
Salaries and expenses of reporter of Supreme Court United States:		
To J. C. B. Davis		6,900 00
W. T. Otto		1,800 00
	8,700 00	
Salaries, Department of State, 1884:		
To F. J. Kieckhoefer		46,033 42
R. C. Morgan		65,898 17
A. U. Wyman		9,567 40
Carried forward	121,498 99	

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Salaries, Department of State, 1884—Continued.		
Brought forward		$121,498 99
Deduct repayments:		
By R. C. Morgan	$9,842 10	
A. U. Wyman	255 40	
		10,097 50
		111,401 49
Salaries, Department of State, 1882:		
By R. C. Morgan	$49 45	
Contingent expenses, Department of State, proof-reading, 1884:		
To F. J. Kieckhoefer		600 00
R. C. Morgan		500 00
		1,100 00
Deduct repayment:		
By R. C. Morgan		20 00
		1,080 00
Contingent expenses, Department of State, proof-reading, 1883:		
By R. C. Morgan	$506 37	
Contingent expenses, Department of State, lithographing, 1884:		
To F. J. Kieckhoefer		670 39
R. C. Morgan		1,000 00
		1,670 39
Deduct repayment:		
By R. C. Morgan		513 92
		1,156 47
Contingent expenses, Department of State, proof-reading, 1883:		
By R. C. Morgan	$128 11	
Contingent expenses, Department of State, stationery and furniture, 1884:		
To F. J. Kieckhoefer		1,746 71
R. C. Morgan		3,500 00
		5,246 71
Deduct repayment:		
By R. C. Morgan		246 71
		5,000 00
Stationery and furniture, &c., Department of State, 1883:		
To R. C. Morgan		206 58
Postage, Department of State, 1884:		
To Post-Office Department		2,440 00
Postage, Department of State, 1883:		
To Post-Office Department		670 00
Editing, publishing, and distributing Revised and Annual Statutes, 1884:		
To R. C. Morgan		4,000 00
Editing, publishing, and distributing Revised and Annual Statutes:		
To R. C. Morgan		308 77
Removal and rearrangement of records, Department of State, 1883 and 1884:		
By R. C. Morgan	$80 96	
Contingent expenses, Department of State, books and maps, 1884:		
To F. J. Kieckhoefer		1,276 81
R. C. Morgan		2,000 00
Carried forward		3,276 81

Contingent expenses, Department of State, books and maps, 1884—Continued.		
Brought forward		$3,276 81
Deduct repayment:		
By R. C. Morgan		276 81
		3,000 00
Contingent expenses, Department of State, books and maps, 1882:		
To F. J. Kieckhoefer		548 86
Deduct repayment:		
By T. T. Dwight		516 68
		32 18
Contingent expenses, Department of State, 1884:		
To F. J. Kieckhoefer		2,500 00
R. C. Morgan		2,320 77
		4,820 77
Deduct repayment:		
By F. J. Kieckhoefer		20 77
		4,800 00
Contingent expenses, Department of State, 1883:		
By R. C. Morgan	$32 00	
Contingent expenses, Department of State, 1881 and prior years:		
By R. C. Morgan	$200 00	
Observance of the centennial anniversary of the surrender of Lord Cornwallis at Yorktown, Va.:		
To R. C. Morgan		998 59
Deduct repayment:		
By R. C. Morgan		669 67
		328 92
Purchase of the Franklin collection of books and papers:		
By R. C. Morgan	$86 89	
Transmission of certain books and mementoes to National Lincoln Monument Association of Springfield, Ill.:		
To R. C. Morgan		24 15
Salaries, Steamboat Inspection Service:		
To G. A. Bartlett		199,000 00
Contingent expenses, Steamboat Inspection Service:		
To Adams Express Company		27 65
J. H. Allison		299 40
American Steam Gauge Company		54 00
L. V. Applegate		491 10
W. Applegate		89 95
G. H. Atkinson		29 95
G. Aukirard		60 00
C. Bagg		1 50
A. Bailey		104 62
E. P. Beckwith		1,198 99
G. S. Bell		352 15
F. W. Belz		3 27
C. C. Bemis		432 25
A. L. Berne		51 00
G. J. Blakeslee		286 65
C. D. Blanchard		610 26
H. O. Brazee		559 50
L. Brainard		525 08
A. Brockman		1 50
C. H. Buckelew		155 45
T. B. Burch		154 54
F. Burnett		1,148 59
Carried forward		6,637 40

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Contingent expenses, Steamboat Inspection Service—Continued.		
Brought forward		$6,637 40
To A. Burnham		257 10
Bureau of Engraving and Printing		226 20
J. W. Burke		390 00
J. T. Butler		278 99
A. Caldwell		69 32
Central Pacific R. R. Co		73 68
J. Chamberlain		1 50
R. Chestnut		53 19
R. Christian		1 50
Chicago and Northwestern Rwy. Co		1 16
Chicago, Rock Island and Pacific R. R. Co		5 82
A. R. Cole		295 20
J. Cook		607 79
W. W. Corcoran		39 66
J. A. Cotter		284 00
H. Coyne		36 35
W. Craig		114 02
P. Cramp		188 53
G. M. Cowan		253 55
J. Denham		26 15
D. P. Dey		35 89
H. H. Devenny		128 35
G. B. Dickson		55 19
A. Dodge		276 33
J. A. Dumont		498 17
J. E. Dunbar		363 00
J. W. Dyer		428 10
O. Eadger		1 50
J. Edgecomb		1 50
H. Eggert		1 80
S. G. Fairchild		160 30
J. Fehrenbatch		1,351 77
J. L. Ferguson		1,052 40
W. Fitzgerald		600 47
T. Fitzpatrick		145 12
C. M. Fellows		1 50
F. Ford		119 25
M. D. Flower		902 59
J. H. Freman		75 00
D. Fry		363 38
S. S. Garrett		1,038 35
R. Gaul		114 77
J. Gilson		24 33
G. W. Girdon		558 07
C. M. Gooding		543 99
A. Gordon		358 15
H. W. Granger		32 55
F. L. Hand		284 28
F. Harringes		1 50
C. S. Harvey		205 48
H. D. Headman		868 56
L. C. Hersberger		393 30
E. E. Hewes		376 95
J. Hillman		87 00
T. D. Hinckley		197 50
G. A. Houghton		112 90
P. B. Hovey		1,202 43
E. S. Jones		289 60
P. Jones		933 18
W. Kirkwood		165 31
R. Learmouth		151 98
J. E. Lee		95 62
F. Leighton		278 95
A. B. Linker		297 41
J. Lotan		377 90
L. Martin		148 93
C. D. MacDougall		18 50
J. Mather		82 80
J. K. Mathews		247 68
I. D. McClenan		120 00
J. Meushaw		504 98
J. Mershon		458 00
J. F. McClain		183 80
A. Moore		155 25
S. H. Moore		212 40
G. W. Moffett		507 00
F. Moore		155 60
Carried forward		28,187 72

Contingent expenses, Steamboat Inspection Service—Continued.		
Brought forward		$28,187 72
To H. E. Morgan		451 00
J. Morgan		1 50
J. R. Neeld		39 08
G. L. Norton		763 09
J. W. Oast		331 39
H. C. Pearson		324 90
Pennsylvania Company		3 24
G. A. Pollister		239 35
H. J. Porter		100 00
J. Ralston		998 75
D. C. Reed		315 50
W. H. Riddle		581 50
L. K. Rochelaux		1 50
A. J. Savage		952 73
W. O. Saville		284 59
J. Schaffer		360 80
F. A. Scott		632 60
J. G. Scott		792 33
H. Scott		185 85
F. A. Severance		1 50
W. Sheffer		192 00
G. H. Starbuck		768 97
C. Staples, jr		775 10
J. H. Stephens		187 95
J. Stork		263 79
B. A. Stanard		128 50
J. H. Strickland		215 48
A. Stowell		39 69
The Ashcroft Manufacturing Company		48 00
P. Toglio		227 74
Treasury Department		1,877 99
Union Pacific R. R. Co		14 65
L. Valentine		140 66
T. N. Van Valkenburgh		1,211 44
A. F. Warburton		375 25
J. B. Warren		194 75
R. J. White		35 45
G. W. Wilmurt		114 65
T. C. Wilson		99 35
P. Wise		367 05
H. Young		77 35
		42,904 73
Deduct repayment:		
By F. N. Shurtleff		10 00
		42,894 73
Court-house and post-office, &c., Abingdon, Va.:		
To G. A. Bartlett		150 50
Court-house and post-office, Austin, Tex.:		
By P. M. Ruthrauff	$0 08	
Court-house and post-office, Atlanta, Ga.:		
To G. A. Bartlett		1,140 79
Post-office and subtreasury at Boston, Mass.:		
To G. A. Bartlett		9,320 13
M. P. Kennard		182,452 04
Treasury Department		26 73
		191,798 90
Post-office, &c., Brooklyn, N. Y.:		
To G. A. Bartlett		65 40
L. Moody		408,500 00
		408,565 40
Post-office, court-house, &c., Baltimore, Md.:		
To G. A. Bartlett		17,404 72
Treasury Department		44 03
E. H. Webster		132,000 00
		149,448 75

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Court-house, post-office, &c., Charleston, W. Va.:		
To G. A. Bartlett	$1 75	
L. H. Ewart	13,000 00	
		13,001 75
Court-house, post-office, &c., Columbus, Ohio:		
To G. A. Bartlett	4,381 96	
L. D. Myers	24,000 00	
C. Richards	750 00	
Treasury Department	20 50	
		29,152 46
Post-office, &c., Council Bluffs, Iowa:		
To G. A. Bartlett	489 50	
P. Armour	6,000 00	
Treasury Department	19 15	
		6,508 65
Post-office at Dover, Del.:		
To G. A. Bartlet	35 84	
Court-house and post-office at Covington, Ky.:		
To G. A. Bartlett	47 75	
Deduct from repayment:		
By D. W. McClung	162 04	
Excess of repayment		114 29
Post-office, court-house, &c., Concord, N. H.:		
To G. H. Bartlett	821 38	
L. H. Carroll	5,000 00	
H. Knight	5,500 00	
J. B. Marston	2,800 00	
C. E. & N. J. Mead and W. J. Mason	8,275 00	
C. E. Mead	5,000 00	
C. E. Mead and Cornelia W. Mead	6,000 00	
W. G. Perley	24,700 00	
		58,096 38
Court-house and post-office, Des Moines, Iowa:		
To G. A. Bartlett	2,412 39	
G. H. Maish	10,000 00	
		12,412 39
Court-house, post-office, &c., Detroit, Mich.:		
To G. A. Bartlett	2,763 40	
W. Livingstone, jr	10,000 00	
Treasury Department	30 73	
		12,794 13
Court-house and post-office at Danville, Va.:		
By T. J. Hobbs	$24 42	
Court-house, post-office, &c., at Denver, Colo.:		
To G. A. Bartlett	510 00	
H. A. W. Tabor	65,000 00	
		65,510 00
Court-house, post-office, &c., at Dallas, Tex.:		
To G. A. Bartlett	562 50	
M. Burke	1,000 00	
J. H. Bryan	5,000 00	
L. S. Garrison	5,000 00	
J. Geemen	8,000 00	
Carried forward	19,562 50	

Court-house, post-office, &c., at Dallas, Tex.—Continued.		
Brought forward	19,562 50	
Deduct repayment:		
By Treasurer United States	5,000 00	
		14,562 50
Court-house, post-office, &c., Erie, Pa.:		
To G. A. Bartlett	799 15	
H. C. Stafford	5,000 00	
		5,799 15
Court-house, post-office, &c., Fort Wayne, Ind.:		
To G. A. Bartlett	261 95	
First Presbyterian Church	25,000 00	
		25,261 95
Court-house and post-office at Frankfort, Ky.:		
To G. A. Bartlett	2,190 44	
J. G. Hatchitt	25,000 00	
Treasury Department	27 86	
		27,218 30
Court-house and post-office at Grand Rapids, Mich.:		
To G. A. Bartlett	464 00	
Court-house, post-office, &c., Greensburg, N. C.:		
To G. A. Bartlett	400 00	
W. B. Bogart	3,163 64	
D. F. Caldwell	8,236 36	
W. R. Meunay	1,600 00	
		13,400 00
Court-house, post-office, &c., Harrisonburg, Va.:		
To G. A. Bartlett	3 00	
W. B. Compton	4,000 00	
H. Shackett	4,000 00	
The Baptist Church, Harrisonburg, Va	4,000 00	
		12,003 00
Post-office, &c., Hannibal, Mo.:		
To D. & Kate Archdeacon	2,500 00	
J. M. Armstrong	10,000 00	
G. A. Bartlett	1,115 50	
		13,615 50
Court-house and post-office at Harrisburg, Pa.:		
To G. A. Bartlett	314 18	
Deduct from repayment:		
By M. W. McAlarney	1,396 13	
Excess of repayment		1,081 95
Court-house and post-office at Indianapolis, Ind.:		
To G. A. Bartlett	45 00	
Court-house and post-office at Jackson, Miss.:		
To G. A. Bartlett	3,331 18	
J. Hill	39,000 00	
Treasury Department	24 65	
		42,355 83
Court-house, post-office &c., Jackson, Tenn.:		
To G. A. Bartlett	42 00	
Caroline Barnhill	1,000 00	
Carried forward		1,042 00

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Court-house, post-office, &c., Jackson, Tenn—Continued.		
Brought forward		$1,042 00
To Caroline Barnhill and Jane Hafelé		1,000 00
C. A. & H. W. McCorry		4,500 00
W. F. Poston		300 00
		6,842 00
Post-office, Jersey City, N. J.:		
To G. A. Bartlett		1,758 20
Court-house, post-office, &c., Jefferson City, Mo.:		
To G. A. Bartlett		320 95
H. Burger		1,500 00
B. H. McCarty		6,100 00
J. Steinniger		5,000 00
W. Warner		281 60
V. Zuber		2,400 00
		15,602 55
Court-house, post-office, &c., Lynchburg, Va.:		
To G. A. Bartlett		261 75
William Owens, deceased		13,500 00
		13,761 75
Court-house and post-office, Little Rock, Ark.:		
To H. M. Cooper		496 39
Deduct repayment:		
By E. Wheeler		236 78
		259 61
Court-house, post-office, &c., Leavenworth, Kans.:		
To G. A. Bartlett		31 50
M. H. Insley and J. L. Byers		10,000 00
		10,031 50
Court-house and post-office at Lincoln, Nebr.:		
To G. A. Bartlett		41 82
Deduct from repayment:		
By D. D. Muir		126 78
Excess of repayment		84 96
Court-house, post-office, &c., Louisville, Ky.:		
To G. A. Bartlett		329 10
Post-office, &c., Minneapolis, Minn.:		
To G. A. Bartlett		4,425 17
O. M. Laraway		10,000 00
Chicago and Northwestern R. R. Co		1 28
J. S. Pillsbury		50,000 00
Treasury Department		27 52
The Pennsylvania Company		1 81
		64,455 78
Court-house and post-office, Montgomery, Ala.:		
To G. A. Bartlett		774 39
A. Bingham		20,000 00
F. M. Shouse		21,000 00
Treasury Department		2 89
		41,777 28
Deduct repayment:		
By F. M. Shouse		7,226 61
		34,550 67
Court-house and post-office, Marquette, Mich.:		
To H. R. Adams		$7,000 00
G. A. Bartlett		259 00
J. W. Stone		200 00
		7,459 00
Court-house and post-office, New York, N. Y.:		
To G. A. Bartlett		155 00
Deduct from repayment:		
By J. G. Hill		804 93
Excess of repayment		649 93
Court-house, post-office, &c., Oxford, Miss.:		
To G. A. Bartlett		126 90
B. C. Fee		2,500 00
S. G. Price		1,200 00
K. G. and Mary A. Thompson		2,250 00
W. P. Withers		50 00
		6,126 90
Post-office and court-house at Philadelphia, Pa.:		
To G. A. Bartlett		6,603 38
J. F. Hartranft		87 95
H. S. Huidekoper		375,110 45
Treasury Department		38 90
		381,840 68
Court-house and post-office, Pittsburgh, Pa.:		
To G. A. Bartlett		9,142 64
J. F. Drava		75,000 00
Treasury Department		16 68
		84,159 32
Court-house and post-office at Pensacola, Fla.:		
To G. A. Bartlett		923 60
L. Hernandez		1,000 00
J. M. Tarble		7,000 00
		8,923 60
Post-office and court-house, &c., Peoria, Ill.:		
To G. A. Bartlett		3,989 79
H. Knowles		23,000 00
Treasury Department		10 16
		26,999 95
Post-office, &c., Ponghkeepsie, N. Y.:		
To G. A. Bartlett		295 20
J. B. Jewett, deceased		37,000 00
		37,295 20
Court-house and post-office at Parkersburg, W. Va.:		
To G. A. Bartlett		84 35
Court-house and post-office, &c., Paducah, Ky.:		
To J. H. Ashcroft		3,700 00
G. A. Bartlett		362 04
Treasury Department		28
		4,062 32
Deduct repayments:		
By J. H. Ashcroft	$229 38	
Treasury Department	172 13	
		401 51
		3,660 81

1883–'84. CIVIL—DIPLOMATIC.

Post-office, court-house, &c., Quincy, Ill.:		
To G. A. Bartlett	$5,186 01	
J. A. Connolly	100 00	
R. Powell	10,000 00	
Treasury Department	25 93	
		15,311 94
Post-office and court-house, Raleigh, N. C.:		
To G. A. Bartlett	33 75	
		33 75
Court-house and post-office, Rochester, N. Y.:		
To G. A. Bartlett	562 29	
Mary E. and Julia Briggs and Sarah S. Wollard	8,500 00	
H. S. Pierce	8,000 00	
Treasury Department	40 18	
		17,102 47
Post-office and court-house, &c., Syracuse, N. Y.:		
To G. A. Bartlett	2,103 90	
J. M. Gilbert	11,000 00	
Treasury Department	32 34	
		13,136 24
Sub-Treasury building, San Francisco, Cal.:		
To G. A. Bartlett	17 75	
		17 75
Post-office, &c., Scranton, Pa.:		
To G. A. Bartlett	422 05	
		422 05
Post-office, &c., St. Joseph, Mo.:		
To G. A. Bartlett	915 50	
		915 50
Post-office, court-house, &c., Shreveport, La.:		
To J. Caldwell	$6,250 00	
J. H. Stoner	3,750 00	
		10,000 00
Court-house and post-office at Topeka, Kans.:		
To T. J. Anderson	52,000 00	
G. A. Bartlett	305 90	
Missouri Pacific Rwy. Co.	80	
The Star Union Line	1 04	
Treasury Department	16 11	
		52,323 85
Court-house and post-office at Trenton, N. J.:		
To G. A. Bartlett	31 60	
		31 60
Post-office at Terre Haute, Ind.:		
To G. A. Bartlett	643 15	
W. W. Carter	6,000 00	
W. R. McLean	20,000 00	
		26,643 15
Court-house and post-office at Utica, N. Y.:		
To G. A. Bartlett	3 00	
		3 00
Court-house, post-office, &c., Williamsport, Pa.:		
To G. A. Bartlett	81 24	
		81 24
Treasury building, Washington, D. C.:		
To J. C. Hobbs	5,000 00	
		5,000 00
Building for Bureau of Engraving and Printing:		
To T. J. Hobbs	941 88	
Deduct repayment:		
By T. J. Hobbs	941 88	

DIPLOMATIC.

Salaries of ministers, 1884:		
To J. Baker, minister, Venezuela	$5,625 00	
M. J. Cramer, minister, Switzerland	224 50	
R. M. Daggett, minister, Hawaii	5,423 39	
L. H. Foote, minister, Corea	1,250 00	
R. Gibbs, minister, Bolivia	421 20	
W. H. Hunt, minister, Russia	985 32	
H. C. Hall, minister, Central America	7,500 00	
J. A. Halderman, minister, Siam	2,452 10	
G. H. Heap, chargé d'affaires, Constantinople	694 96	
J. M. Langston, minister, Hayti	4,922 38	
C. A. Logan, minister, Chili	11,307 24	
Morton, Rose & Co., bankers, London	115,215 87	
G. Maney, minister, Bolivia	1,154 90	
P. H. Morgan, minister, Mexico	11,011 00	
S. L. Phelps, minister, Peru	2,342 40	
D. L. Reed, chargé d'affaires, Madrid	890 00	
L. Richmond, chargé d'affaires, Rome	1,027 17	
J. H. Smyth, minister, Liberia	4,768 53	
W. L. Scruggs, minister, Bogota	5,625 00	
Carried forward	182,840 96	
Salaries of ministers, 1884—Cont'd. Brought forward	$182,840 96	
To W. W. Thomas, jr., minister, Sweden and Norway	101 90	
W. Williams, chargé d'affaires, Uruguay and Paraguay	4,065 55	
	187,008 41	
Deduct repayments:		
By L. H. Foote $1,250 00		
J. M. Langston 380 05	1,630 05	
	185,378 36	
Salaries of ministers, 1883:		
To W. W. Astor, minister, Italy	1,125 00	
J. Baker, minister, Venezuela	1,875 00	
S. G. W. Benjamin, minister, Persia	1,120 00	
J. M. Comly, minister, Hawaii	629 66	
M. J. Cramer, minister, Switzerland	280 00	
R. M. Daggett, minister, Hawaii	1,875 00	
N. Fish, minister, Belgium	40 00	
R. Gibbs, minister, Bolivia	176 63	
H. C. Hall, minister, Central America	1,000 00	
W. H. Hunt, minister, Russia	245 00	
J. M. Langston, minister, Hayti	1,640 39	
Carried forward	10,006 68	

1883–'84. DIPLOMATIC.

Salaries of ministers, 1883—Cont'd.		
Brought forward		$10,006 68
To C. A. Logan, minister, Chili		1,700 00
G. Maney, minister, Bolivia		1,055 55
R. C. Morgan, disbursing clerk, State Department		1,000 00
P. H. Morgan, minister, Mexico		989 00
Morton, Rose & Co., bankers, London		32,322 05
S. L. Phelps, minister, Peru		357 14
D. T. Reed, chargé d'affaires, Madrid		132 75
J. H. Smyth, minister, Liberia		319 51
W. L. Scroggs, minister, Bogota		1,465 00
J. L. Stevens, minister, Sweden and Norway		213 47
A. A. Sargent, minister, Germany		1,145 00
W. W. Thomas, jr., minister, Sweden and Norway		515 11
W. Williams, chargé d'affaires, Uruguay and Paraguay		836 70
J. R. Weaver, consul-general, Austria		939 56
J. C. White, chargé d'affaires, Rio de Janeiro		2,729 65
J. R. Young, minister, China		170 00
		55,897 17
Deduct repayments:		
By appropriation account	$246 20	
J. M. Comly	6 86	
J. M. Langston	375 80	
G. Maney	20 22	
Morton, Rose & Co.	3,478 36	
		4,127 44
		51,769 73
Salaries secretaries of legation, 1884:		
To H. C. Hall, minister, Central American States		500 00
Morton, Rose & Co., bankers, London		20,377 74
H. H. Morgan, secretary legation, Mexico		1,651 70
E. S. Nadal, secretary legation, London		83 95
W. L. Strong, secretary legation, Vienna		136 96
C. B. Trail, secretary legation, Brazil		117 39
J. C. White, chargé d'affaires, Rio de Janeiro		225 00
		23,092 74
Salaries secretaries of legation, 1883:		
To H. C. Hall, minister, Central American States		250 00
H. H. Morgan, secretary legation, Mexico		148 30
Morton, Rose & Co., bankers, London		3,554 91
J. C. White, chargé d'affaires, Rio de Janeiro		488 74
		4,441 95
Deduct repayments:		
By appropriation account	$209 65	
Morton, Rose & Co.	377 74	
		587 39
		3,854 56
Extending diplomatic relations with Governments of Eastern Asia:		
To L. H. Foote, minister, Corea		3,750 00

Contingent expenses, foreign missions, 1884:		
To W. W. Astor, minister, Italy		$77 37
S. G. W. Benjamin, minister, Persia		1,215 57
J. Baker, minister, Venezuela		79 72
C. P. Barnard, consul, Leghorn		27 02
J. A. Bingham, minister, Japan		5 00
M. J. Cramer, minister, Switzerland		125 00
N. D. Comanos, vice-consul-general, Cairo		130 62
W. L. Dayton, consul, Netherlands		43 75
R. M. Daggett, minister, Hawaii		244 02
H. S. Everett, chargé d'affaires, Berlin		510 00
C. Ewers, consul, Windsor		100 00
L. H. Foote, consul, Corea		1,091 65
L. Foote, consul, Turkey		149 57
J. W. Foster, minister, Spain		2,223 65
N. Fish, minister, Belgium		15 00
J. B. Glover, consul, Havre		55 91
H. C. Hall, minister, Central American States		1,580 79
W. H. Hunt, minister, Russia		138 63
C. Holcombe, secretary legation, Peking		1,148 39
W. Hoffman, minister, Denmark		38 33
W. J. Hoppin, chargé d'affaires, Great Britain		143 07
T. J. Keickhofer, disbursing clerk		16,000 00
C. A. Logan, minister, Chili		781 46
J. R. Lowell, minister, England		1,054 72
J. M. Langston, minister, Hayti		324 62
R. C. Morgan, disbursing clerk		25,000 00
Morton, Rose & Co., bankers, London		20,029 20
L. P. Morton, minister, France		265 26
P. H. Morgan, minister, Mexico		2,087 87
T. A. Osborn, minister, Brazil		77 99
S. L. Phelps, minister, Peru		3,742 99
S. B. Packard, consul, Liverpool		486 66
W. L. Scruggs, minister, Colombia		400 00
E. Schuyler, minister, Roumania		253 24
A. A. Sargent, minister, Germany		943 54
F. H. Schuch, consul, Barcelona		100 00
W. W. Thomas, minister, Sweden and Norway		316 21
A. Taft, minister, Austria		155 00
W. Williams, chargé d'affaires, Uruguay and Paraguay		256 38
L. Wallace, minister, Turkey		808 27
J. R. Young, minister, China		2,956 60
		85,273 07
Deduct repayments:		
By Department of State	$729 18	
W. H. Hunt	110 32	
R. C. Morgan	8,766 33	
J. W. Siler	345 00	
J. R. Young	27 84	
		9,978 67
		75,294 40

1883–'84. DIPLOMATIC.

Contingent expenses, foreign missions, 1883:		
To W. W. Astor, minister, Italy..	$13 93	
S. G. W. Benjamin, minister, Persia	770 78	
M. J. Cramer, minister, Switzerland	492 75	
R. M. Dagget, minister, Hawaii	91 36	
J. W. Foster, minister, Spain	109 98	
L. H. Foote, minister, Corea .	711 97	
J. M. Francis, minister, Portugal	602 30	
G. Goward, secretary legation, Japan	102 55	
W. H. Hunt, minister, Russia	383 43	
H. C. Hall, minister, Central American States	284 68	
J. A. Halderman, minister, Siam	250 00	
C. A. Logan, minister, Chili.	664 10	
J. M. Langston, minister, Hayti	260 41	
J. R. Lowell, minister, England	480 88	
P. H. Morgan, minister, Mexico	782 75	
L. P. Morton, minister, France	663 98	
R. C. Morgan, disbursing clerk	1,107 05	
G. Maney, minister, Bolivia..	312 02	
Morton, Rose & Co., bankers, London	6,954 46	
J. Mathe, consul, Sonsonate.	145 37	
G. P. Marsh, late minister, Italy	94	
T. A. Osborn, minister, Brazil	80 77	
S. B. Packard, consul, Liverpool	486 66	
G. P. Pomeroy, consul-general, Cairo	628 21	
D. T. Reed, chargé de affaires, Madrid	58 35	
A. A. Sargent, minister, Germany	83 92	
W. L. Scruggs, minister, Colombia	100 00	
E. Schuyler, minister, Roumania	171 81	
J. L. Stevens, minister, Sweden and Norway	17 63	
R. W. Turpin, vice-consul, Panama	100 00	
A. Taft, minister, Austria...	155 00	
W. Williams, chargé d'affaires, Uruguay and Paraguay	29 94	
L. Wallace, minister, Turkey.	75 00	
J. R. Young, minister, China	27 84	
		17,200 82
Deduct repayments:		
By appropriation account	$1,262 49	
E. L. Baker	257 81	
C. A. Logan	100 00	
R. C. Morgan	561 06	
Morton, Rose & Co...	29 20	
Secretary of State....	147 85	
		2,358 41
		14 842 41
Contingent expenses, foreign missions, 1882:		
To T. F. Dwight		1,275 00
Deduct repayment:		
By A. A. Garguela		12 37
		1,262 63
Contingent expenses, foreign missions, 1881 and prior years:		
By T. F. Dwight	$649 99	
R. C. Morgan	70 96	
	720 95	
Salaries, consular service, 1884:		
To E. M. Allen, consul, Bermuda		$1,125 00
L. T. Adams, consul, Geneva		969 75
H. L. Atherton, consul, Pernambuco		1,515 32
H. C. C. Astwood, consul, San Domingo		1,122 84
C. C. Andrews, consul, Rio Janeiro		4,125 65
D. Atwater, consul, Tahiti...		788 00
T. Adamson, consul, Panama		2,496 66
W. C. Burchard, consul, Ruatan and Truxillo		895 82
B. H. Barrows, consul, Dublin		1,380 08
C. Bartlett, consul, Guadeloupe		1,125 00
H. N. Beach, consul, Guayaquil		1,587 84
S. P. Brown, consular clerk, Belfast		75 00
E. L. Baker, consul, Buenos Ayres		2,282 16
W. S. Bird, consul, Laguayra.		1,088 32
J. M. Bailey, consul, Hamburg		1,250 00
C. P. Barnard, consul, Leghorn		750 00
M. S. Brewer, consul, Berlin .		2,850 00
S. H. M. Byers, consul, Zurich		1,500 00
H. M. Brent, consul, Callao...		2,444 62
L. A. Bergholz, consul, Chinkiang		863 90
C. C. Bancroft, vice-consul-general, Calcutta		3,236 16
S. P. Bayley, consul, Palermo		456 53
H. D. Bennett, consul, Nantes		250 00
S. E. Belford, consul, Levuka		82 42
A. Badeau, consul-general, London		3,000 00
R. S. Chilton, consul, Goderich		1,123 67
J. G. Crawford, consul, Coaticook		1,701 33
E. Conroy, consul, San Juan.		1,500 00
A. J. Cassard, consul, Tampico		1,126 50
D. J. Crain, consul, Milan....		1,125 50
T. Canisius, consul, Apia....		1,862 73
F. M. Cheney, consul, Zanzibar		752 75
P. Carroll, consul, Palermo ..		396 70
R. T. Clayton, consul, Para ...		123 63
G. L. Catlin, consul, Stuttgart.		1,125 00
F. Charlesworth, consul, Funchal		123 63
F. D. Cheshire, vice-consul-general, Shanghai		1,675 44
D. M. Dunn, consul, Valparaiso		2,241 84
D. Duer, jr., consular clerk, Lisbon		917 60
J. T. Dubois, consul, Leipsic.		1,360 76
A. J. DeZeyk, consul, Turin.		923 50
O. N. Denny, consul-general, Shanghai		3,236 45
S. W. Dabney, consul, Fayal		1,125 00
H. Davy, consul, Newcastle.		229 03
A. V. Dockery, consul, Leeds		1,000 00
B. O. Duncan, consul, Naples.		37 50
D. Eckstein, consul, Amsterdam		1,125 00
C. Ewers, consul, Windsor ..		1,125 00
J. Fletcher, consul, Genoa ..		1,590 74
A. P. Francias, vice-consul, Genoa		78 10
Carried forward		64,888 47

1883-'84. DIPLOMATIC.

Salaries, consular service, 1884—Continued.	
Brought forward	$64,888 47
To P. Figyelmesy, consul, Demerara	1,506 97
B. F. Farnham, consul, Bombay	782 88
W. G. Frye, consul, Halifax	2,250 00
J. B. Glover, consul, Havre	2,904 20
G. W. Griffin, consul, Auckland	1,110 77
S. Goutier, consul, Cape Haytien	870 00
W. E. Goldsborough, consul, Amoy	2,578 78
W. F. Grinnell, consul, Bradford	2,250 00
W. H. Garfield, consul, St. Pierre	724 38
T. D. Golding, consul, Laguayra	36 68
G. Gifford, consul, Basle	32 97
F. G. Houghwout, consul, Naples	1,164 47
W. C. Howells, consul, Toronto	25 78
F. W. Hyndman, consul, Charlottetown	238 35
F. P. Hastings, consular clerk, Honolulu	900 00
G. H. Holt, consul, Gaspé Basin	757 17
J. W. Hazelton, consul, Hamilton	1,500 00
G. H. Heap, consul-general, Constantinople	2,179 12
B. Harte, consul, Glasgow	2,250 00
R. Y. Holley, consul, Barbadoes	686 49
G. E. Hoskinson, consul, Kingston	1,024 99
J. Hutchison, consul, Funchal	32 50
J. W. Harper, consul, Munich	1,127 78
S. P. Hubbell, consul, St. John's	1,125 00
H. O. Heffter, vice-consul, Leipsic	423 91
W. E. Howard, consul, Toronto	1,000 00
D. K. Hobart, consul, Windsor	757 74
O. Hatfield, consul, Batavia	500 00
G. H. Horstman, consul, Nuremberg	1,500 00
E. Johnson, consul, Pictou	1,084 55
A. C. Jones, consul, Nagasaki	2,146 51
C. E. Jackson, consul, Antigua	905 63
A. Jourdan, consul, Algiers	749 68
E. R. Jones, consul, Cardiff	1,842 92
W. King, consul, Birmingham	1,875 00
C. Klinck, consul, Manila	423 67
C. Kahlo, consul, Sydney	1,500 69
H. Keifer, consul, Stettin	518 12
H. Kreisman, consul-general, Berlin	271 75
F. Leland, consul, Hamilton	16 30
J. C. Laudreau, consul, Santiago de Cuba	1,876 50
J. Low, consul, Clifton	1,129 50
P. Lange, consul, St. Stephen	1,123 50
L. A. Lothrop, consul, Bristol	1,074 08
G. F. Lincoln, consul, Stettin	1,019 04
W. B. Lovie, vice-consul, Cardiff	333 86
J. A. Lewis, consul, Sierra Leone	600 48
H. S. Lasar, consul, Port Stanley	1,168 14
J. A. Leonard, consul, Leith	2,265 70
R. Locke, consul, Newcastle	504 59
E. Lane, consul, Tunstall	1,875 00
Morton, Rose & Co., bankers, London	3,500 00
H. M. Moore, vice-consul, Callao	114 24
Carried forward	125,048 85

Salaries, consular service, 1884—Continued.	
Brought forward	$125,048 85
To J. H. Moore, consul, Callao	104 61
W. Morey, consul, Ceylon	1,133 62
H. Matson, consul, Calcutta	1,065 66
B. Mackey, consul, Rio Grande do Sul	481 55
T. J. McLane, jr., consul, Nassau	1,500 00
A. Muller, jr., consul, Valparaiso	91 34
J. A. McKnight, consul, St. Helena	1,057 69
S. Merrill, consul, Jerusalem	1,201 17
E. B. Mussey, consul, Mahé	393 75
D. A. McKinley, consul, Honolulu	3,000 00
J. T. Mason, consul, Dresden	1,875 00
J. S. Martin, vice-consul, Marseilles	1,758 24
W. E. Meyer, consul, Para	251 37
F. H. Mason, consul, Basle	1,215 43
E. A. Merritt, consul-general, London	1,173 92
H. C. Marston, consul, Malaga	1,011 26
L. H. Mitchell, vice-consul, London	326 08
F. A. Matthews, consul, Tangier	545 78
G. F. Mosher, consul, Sonneberg	1,500 00
O. Malmros, consul, Leith	357 13
J. S. Mosby, consul, Hong-Kong	2,000 00
P. Naylor, vice-consul, Genoa	16 35
McW. B. Noyes, consul, Venice	764 06
E. L. Oppenheim, consul, Cadiz	1,128 96
G. H. Owen, consul, Messina	1,125 00
J. J. Piatt, consul, Cork	1,530 57
S. D. Pace, consul, Sarnia	1,125 00
W. P. Pierce, consul, Cienfuegos	1,856 40
LaRue Peck, consul, Fort Erie	1,125 00
B. J. Pridgeon, consul, Piedras Negras	750 00
F. Paul, consul, Odessa	1,631 90
H. Pease, consul, Santiago, C. V. I	785 16
B. F. Peixotto, consul, Lyons	1,875 00
J. S. Potter, consul, Crefeld	1,500 00
E. H. Plumacher, consul, Maracaibo	1,500 00
W. A. Preller, consul, Rio Grande do Sul	531 21
A. C. Prindle, consul, Para	802 57
T. T. Prentiss, consul, Port Louis	1,316 19
C. A. Phelps, consul, Prague	1,500 00
L. W. Pilcher, consul, Tientsin	1,738 02
S. B. Packard, consul, Liverpool	3,000 00
J. S. Parish, consul, Chemnitz	1,000 00
L. Richmond, secretary legation, Rome	2,128 53
J. T. Robinson, consul, Beirut	1,568 75
R. B. Robbins, consul, Ottawa	2,333 67
A. L. Russell, consul, Montevideo	1,002 71
H. B. Ryder, consul, Copenhagen	1,146 29
G. W. Roosevelt, consul, Bordeaux	1,875 00
D. L. Reed, consul, Madrid	301 32
W. E. Rowland, consul, Nice	46 22
F. M. Rice, consul, Colon	1,362 42
E. Stevens, consul, Ningpo	2,490 17
L. D. Syle, consul, Funchal	614 80
V. V. Smith, consul, St. Thomas	1,501 17
Carried forward	190,064 89

883-'84. DIPLOMATIC.

Salaries, consular service, 1884—Continued.		
Brought forward		$190 064 89
To E. J. Smithers, consul, Chinkiang		1,888 16
H. L. Slaght, consul, Prescott		1,130 43
W. P. Sutton, consul, Matamoros		1,500 00
S. H. Smith, consul, Nuevo Laredo		795 95
E. Stanton, consul-general, St. Petersburg		1,954 74
N. K. Sawyer, consul, Turks Island		705 99
D. H. Strother, consul, Mexico		1,500 00
J. A. Sutter, consul, Acapulco		1,177 00
H. J. Sprague, consul, Gibraltar		1,125 00
J. W. Siler, consul, Cape Town		1,078 95
O. M. Spencer, consul, Melbourne		3,140 89
F. H. Scheuch, consul, Barcelona		990 16
J. F. Shepard, consul, Hankow		2,430 48
S. Spackman, consul, Cologne		1,500 00
J. Smith, consul, Nottingham		1,875 00
C. Seymour, consul, Canton		2,250 48
J. H. Steuart, consul, Antwerp		1,875 00
A. G. Studer, consul, Singapore		1,886 58
W. Schoenle, consul, Barmen		1,500 00
R. J. Stevens, consul, Palermo		164 84
L. P. Stearns, consul, Montreal		3,000 00
W. W. Sikes, consul, Cardiff		386 09
E. M. Smith, consul, Mannheim		1,027 18
W. E. Stevens, consul, Smyrna		1,694 38
A. D. Shaw, consul, Manchester		2,250 00
J. Stahel, consul, Osaka and Hiogo		2,251 13
J. A. Springer, consul, Havana		407 60
A. Stein, vice-consul, Brussels		224 19
S. A. Touhey, consular clerk at large		775 00
M. H. Twitchell, consul, Kingston		1,125 00
J. W. Taylor, consul, Winnipeg		1,128 59
William Thompson, consul, Southampton		1,125 00
J. Turner, consul, Amherstburg		1,125 00
R. D. Tucker, consul, Manila		376 21
B. Tzschuck, consul, Vera Cruz		2,250 00
O. V. Tousley, consul, Leipsic		576 09
G. C. Tanner, consul, Verviers		1,125 00
J. G. Voight, consul, Manila		1,129 93
A. Van Camp, consul, Levuka		746 65
J. F. Van Ingen, consul, Talcahuano		628 17
F. Vogeler, consul-general, Frankfort		2,250 00
D. Vickers, consul, Matanzas		1,866 85
T. B. Van Buren, consul-general, Kanagawa		5,586 38
F. Visich, consul, Trieste		500 00
J. N. Wasson, consul, Quebec		1,133 32
C. M. Wood, consular clerk, Rome		1,268 65
W. A. Worden, consul, Charlottetown		918 78
T. Wilson, consul, Nantes		886 48
A. B. Wood, consul, Belfast		1,925 00
J. B. Weaver, consul, Berlin		1,125 00
J. Worthington, consul, Malta		1,180 98
A. Willard, consul, Guaymas		780 28
Carried forward		263,307 47

Salaries, consular service, 1884—Continued.		
Brought forward		$263,307 47
To R. M. Whitney, consul, Tamatave		751 65
J. C. A. Wingate, consul, Foochow		2,610 00
W. L. Welsh, consul, Florence		1,125 00
E. E. White, consul, Cabello		250 00
V. B. Wells, consul, Dundee		1,875 00
J. R. Weaver, consul, Vienna		2,250 00
G. Walker, consul, Paris		4,500 00
E. P. White, consul, Mahé		393 75
D. B. Warner, consul, St. John		1,457 19
J. F. Winter, consul, Rotterdam		1,500 00
C. B. Webster, consul, Sheffield		1,875 00
J. Wilson, consul, Brussels		1,650 81
J. M. Wilson, consul, Bremen		1,875 00
E. A. Youngs, consul, Manila		264 95
F. C. Zimmerman, consul, Charlottetown		461 13
J. C. Zuck, consul, Tientsin		890 08
		287,037 03
Deduct repayments:		
By C. C. Andvews	$751 18	
D. Atwater	38 00	
H. N. Beach	87 71	
C. C. Bancroft	26 96	
L. A. Bergholtz	56 00	
J. G. Crawford	82 75	
F. D. Cheshire	750 00	
O. N. Denny	989 24	
J. Fletcher	259 95	
J. B. Glover	682 59	
J. G. Hoskinson	92 66	
E. R. Jones	77 99	
C. Kahlo	2 18	
J. A. Leonard	333 55	
W. B. Lovie	368 81	
F. A. Matthews	32 00	
H. Mattson	182 50	
W. A. Preller	3 52	
H. Pease	20 60	
G. P. Pomeroy	30 50	
D. T. Reed	2 50	
E. J. Sunthers	105 66	
W. W. Sikes	118 35	
D. Vickers	363 28	
F. Visich	500 00	
		5,958 48
		$281,078 55
Salaries consular service, 1883:		
To C. M. Allen, consul, Bermuda		375 00
H. L. Atherton, consul, Pernambuco		517 43
L. T. Adams, consul, Geneva		270 88
C. C. Andrews, consul-general Rio de Janeiro		1,934 67
T. Adamson, consul, Panama		585 16
D. Atwater, consul, Tahiti		250 00
H. C. C. Astwood, consul, San Domingo		436 27
B. H. Barrows, consul, Dublin		500 00
A. Badeau, consul-general, Havana		3,600 00
H. N. Beach, consul, Puerto Cabello		750 00
E. L. Baker, consul, Buenos Ayres		1,559 75
W. S. Bird, consul, La Guayra		375 00
J. M. Bailey, consul, Hamburg		625 00
C. P. Barnard, consul, Leghorn		375 00
S. P. Bayley, consul, Palermo		375 00
C. Bartlett, consul, Guadeloupe		375 00
Carried forward		13,004 16

1883–'84. DIPLOMATIC.

Salaries, consular service, 1883—Continued.	
Brought forward	$13,004 16
To M. S. Brewer, consul, Berlin	1,250 00
S. H. M. Byers, consul, Zurich	499 51
W. C. Burchard, consul, Ruatan and Truxillo	104 18
R. S. Chilton, consul, Goderich	442 80
J. G. Crawford, consul, Coaticook	565 00
A. T. Carter, vice-consul, Gaspé Basin	134 62
D. J. Crain, consul, Milan	374 99
A. J. Cassard, consul, Tampico	375 50
G. L. Catlin, consul, Stuttgart	375 00
T. Canisius, consul, Apia	1,049 21
E. Conroy, consul, San Juan	500 00
G. C. Campbell, commercial agent, Gaboon	250 00
F. M. Cheney, consul, Zanzibar	27 47
D. M. Dunn, consul, Charlottetown	375 00
L. DeR. Du Verge, consul, St. Paul de Loando	394 03
A. J. De Zeyk, consular clerk, Lisbon	308 64
A. V. Dockrey, consul, Leeds	1,000 00
J. Dittmer, vice-consul, Stettin	256 91
D. Duer, consular clerk, Lisbon	49 45
B. O. Duncan, consul, Naples	417 69
J. T. DuBois, consul, Aix la Chapelle	380 41
O. N. Denny, consul-general, Shanghai	2,161 35
S. W. Dabney, consul, Fayal	375 00
C. Ewers, consul, Windsor	375 00
D. Eckstein, consul, Amsterdam	375 00
J. J. Flinn, consul, Chemnitz	774 24
W. G. Frye, consul-general, Halifax	752 92
P. Figyelmesy, consul, Demerara	756 26
B. F. Farnham, consul, Bombay	289 15
A. P. Francia, consul, Geneva	197 80
J. W. Farrand, consul, San Domingo	313 73
J. B. Glover, consul, Havre	1,769 14
S. Goutier, consul, Cape Haytien	250 00
W. H. Garfield, consul, Martinique	331 37
W. F. Grinnell, consul, Bradford	750 00
W. E. Goldsborough, consul, Amoy	873 00
G. W. Griffin, consul, Auckland	737 58
J. F. Hazleton, consul, Hamilton	440 94
G. H. Holt, consul, Gaspé Basin	115 38
O. Hatfield, consul, Batavia	435 57
W. C. Howells, consul, Toronto	500 00
J. A. Halderman, consul, Bangkok	760 30
D. K. Hobart, consul, Windsor	250 00
G. E. Hoskinson, consul, Kingston	502 51
G. H. Heap, consul-general, Constantinople	948 60
J. W. Harper, consul, Munich	375 76
B. Harte, consul, Glasgow	750 00
S. P. Hubbell, consul, St. John's	375 00
R. Y. Holley, consul, Barbadoes	375 00
Carried forward	39,045 17

Salaries, consular service, 1883—Continued.	
Brought forward	$39,045 17
To G. H. Horstman, consul, Nuremberg	500 00
P. Jones, consul, San Domingo	4 18
E. Johnson, consul, Pictou	375 00
C. E. Jackson, consul, Antigua	375 00
E. R. Jones, consul, Newcastle	375 84
A. C. Jones, consul, Nagasaki	750 00
C. Kahlo, consul, Sydney	2,001 82
W. King, consul, Birmingham	625 00
L. A. Lothrop, consul, Bristol	376 49
P. Lange, consul, St. Stephen	376 48
J. Low, consul, Clifton	376 50
J. C. Landreau, consul, Santiago de Cuba	625 00
J. A. Leonard, consul, Leith	964 83
J. A. Lewis, consul, Sierra Leone	250 00
H. S. Lasar, consul, Port Stanley	310 53
F. Leland, consul, Hamilton	500 00
E. E. Lane, consul, Tunstall	625 00
J. S. Mosby, consul, Hong-Kong	1,000 00
J. E. Montgomery, consul, Trieste	55 55
A. Moller, jr., consul, Valparaiso	1,105 24
E. A. Merritt, consul-general, London	3,000 00
S. Merrill, consul, Jerusalem	400 83
T. J. McLain, jr., consul, Nassau	500 00
J. T. Mason, consul, Dresden	625 00
J. A. McKnight, consul, St. Helena	520 09
D. A. McKinley, consul, Honolulu	1,100 00
H. C. Marston, consul, Malaga	139 00
J. H. Moore, consul, Callao	1,591 02
G. F. Mosher, consul, Sonneberg	531 61
W. Morly, consul, Ceylon	375 00
E. P. Mussey, consul, Mahé	393 75
Morton, Rose & Co., bankers, London	939 57
F. H. Mason, consul, Basle	522 50
F. A. Matthews, consul, Tangier	5 02
H. C. Miller, consul, Guayaquil	455 79
H. Matson, consul, Calcutta	1,250 00
McW. B. Noyes, consul, Venice	251 38
E. L. Oppenheim, consul, Cadiz	375 00
G. H. Owen, consul, Messina	375 00
S. D. Pace, consul, Port Sarnia	375 00
LaRue Peck, consul, Fort Erie	375 00
J. J. Piatt, consul, Cork	254 31
W. A. Preller, consul, Rio Grande do Sul	533 51
S. B. Packard, consul, Liverpool	3,000 00
F. Paul, consul, Odessa	551 82
B. F. Peixotto, consul, Lyons	625 00
H. Pease, consul, Santiago, C. V. I	257 44
J. S. Potter, consul, Crefeld	500 00
E. H. Plumacher, consul, Maracaibo	500 00
C. A. Phelps, consul, Prague	500 00
W. P. Pierce, consul, Cienfuegos	625 00
T. T. Prentiss, consul, Port Louis	497 50
A. C. Prindle, consul, Para	375 00
G. P. Pomeroy, consul, Cairo	285 00
W. W. Robinson, consul, Tamatave	820 95
Carried forward	74,043 72

1883–'84. DIPLOMATIC.

Salaries, consular service, 1883—Continued.		
Brought forward		$74,043 72
To F. W. Rice, consul, Colon		1,689 02
R. B. Robbins, commercial agent, Ottawa		750 00
W. F. Roland, consul, Nice		281 07
L. Richmond, consul-general, Rome		940 00
J. T. Robeson, consul, Beirut		579 17
H. B. Ryder, consul, Copenhagen		391 45
A. L. Russell, cousul, Montevideo		510 53
G. W. Roosevelt, consul, Bordeaux		625 00
E. D. Ropes, consul, Zanzibar		76 92
E. Stevens, consul, Ningpo		625 00
W. E. Stevens, consul, Smyrna		175 00
W. Schuchardt, consul, Piedras Negras		250 00
W. P. Sutton, consul, Matamoros		500 00
E. Stanton, consul-general, St. Petersburg		500 00
S. P. Stearns, consul, Montreal		1,000 00
H. L. Slaght, consul, Prescott		375 00
W. E. Stevens, consul, Smyrna		500 00
L. D. Syle, consul, Funchal		396 26
W. W. Sykes, consul, Cardiff		832 19
H. J. Sprague, consul, Gibraltar		375 00
J. W. Siler, consul, Cape Town		587 15
J. A. Sutter, jr., consul, Acapulco		823 00
F. H. Scheuch, consul, Barcelona		376 00
E. J. Smithers, consul, Chinkiang		914 65
S. Spackman, consul, Cologne		500 00
J. H. Steuart, consul, Antwerp		625 00
J. Smith, consul, Nottingham		625 00
E. M. Smith, consul, Mannheim		375 00
I. F. Shepard, consul, Hankow		888 92
D. H. Strother, consul, Mexico		500 00
V. V. Smith, consul, St. Thomas		163 12
J. Stahel, consul, Osaka and Hiogo		750 00
S. H. Smith, consul, Nuevo Laredo		250 00
O. M. Spencer, consul, Melbourne		1,129 49
C. Seymour, consul, Canton		884 52
A. G. Studer, consul, Singapore		625 00
A. D. Shaw, consul, Manchester		750 00
W. Schoenle, consul, Barmen		500 00
N. K. Sawyer, consul, Turks Island		294 51
W. H. Twitchell, consul, Kingston		375 00
J. W. Taylor, consul, Winnipeg		382 55
O. V. Tousley, consul, Leipsic		499 92
B. Tzschuck, consul, Vera Cruz		1,500 00
W. H. Trumbull, consul, Zanzibar		206 75
W. Thompson, consul, Southampton		375 00
G. C. Turner, consul, Verviers and Liege		375 00
H. A. Taylor, consul, Marseilles		625 00
J. Turner, consul, Amhertsburg		375 00
R. D. Tucker, consul, Manila		612 50
J. F. Van Ingen, consul, Talcahuano		357 42
D. Vickers, consul, Matanzas		1,500 00
Carried forward		104,160 83

Salaries, consular service, 1883—Continued.		
Brought forward		$104,160 83
To F. Vogeler, consul, Frankfort		750 00
F. Visich, consul, Trieste		331 45
A. Van Camp, consul, Levuka		257 77
T. B. Van Buren, consul-general, Kanagawa		1,759 14
J. N. Wasson, consul, Quebec		377 10
T. Wilson, consul, Nantes		250 00
A. B. Wood, consul, Belfast		1,000 00
C. M. Wood, consular clerk, Rome		315 00
J. B. Weaver, consul, Bahia		375 00
J. R. Weaver, consul, Vienna		326 92
W. L. Welsh, consul, Florence		375 00
A. Willard, consul, Guaymas		210 70
C. B. Webster, consul, Sheffield		625 00
W. B. Wells, consul, Dundee		625 00
J. Wilson, consul, Brussels		625 00
J. F. Winter, consul, Rotterdam		500 00
D. B. Warner, consul, St. John		500 00
J. M. Wilson, consul, Bremen		625 00
J. C. A. Wingate, consul, Foochow		875 00
R. M. Whitney, consul, Tientsin		413 76
G. Walker, consul-general, Paris		2,400 00
J. C. Zuck, consul, Tientsin		890 87
		118,568 54
Deduct repayments:		
By C. C. Andrews	$30 01	
Appropriation account	$2,575 03	
J. G. Crawford	62 00	
L. DeR. Du Verge	583 70	
O. N. Denny	500 00	
A. P. Francia	150 00	
J. B. Glover	269 14	
D. K. Hobert	12 19	
C. Kahlo	65 82	
J. A. Leonard	334 80	
H. C. Marston	245 93	
W. A. Preller	33 51	
G. P. Pomeroy	140 00	
W. W. Sikes	175 00	
J. F. Van Ingen	6 60	
F. Visich	276 51	
A. Willard	25 87	
		5,486 11
		113,082 43
Salaries consular service, 1882:		
To O. Malmros, consul, Pictou		61 14
Morton, Rose & Co., bankers, London		535 31
		596 45
Deduct payments:		
By A. B. Cobb	$127 71	
J. C. Kretchmar	58 35	
		186 06
		410 39
Salaries consular service, 1881 and prior years:		
By R. Beardsly	$18 30	
J. C. Eckbert	162 92	
D. B. Sickels	6 36	
A. T. L. Torbert	218 45	
	406 03	
Allowance for consular clerks, 1884:		
To T. Adamson, consul, Panama		450 00
C. C. Andrews, consul-general, Rio de Janeiro		500 00
Carried forward		950 00

1883-'84. DIPLOMATIC.

Allowance for consular clerks, 1884—Continued.	
Brought forward	$950 00
To M. S. Brewer, consul, Berlin	1,125 00
J. M. Bailey, consul, Hamburg	750 00
F. Belli, consul, Palermo	100 00
S. P. Bayley, consul, Palermo	91 30
S. H. M. Byers, consul, Zurich	150 00
C. C. Bancroft, vice-consul, Calcutta	500 00
G. L. Catlin, consul, Stuttgart	450 00
S. W. Cooper, consul, Gothenberg	94 50
M. J. Cramer, consul, Berne	187 50
T. D. Cheshire, consul, Shanghai	1,000 00
A. V. Dockery, consul, Leeds	300 00
O. N. Denny, consul-general, Shanghai	500 00
J. T. Du Bois, consul, Leipsic	250 00
P. Figyelmesey, consul, Demerara	505 10
W. G. Frye, consul, Halifax	604 05
C. C. Ford, consul, Sagua la Grande	300 00
J. Fletcher, consul, Genoa	450 00
J. B. Glover, consul, Havre	750 00
W. F. Grinnell, consul, Bradford	600 00
F. G. Houghwout, consul, Naples	465 00
G. H. Heap, consul-general, Constantinople	99 00
G. F. Horstman, consul, Nuremberg	250 00
B. Harte, consul, Glasgow	500 00
H. O. Hoffter, consul, Leipsic	211 95
E. R. Jones, consul, Cardiff	203 36
W. Kaster, jr., vice-consul, Mannheim	120 74
C. Kahlo, consul, Sydney	200 00
W. King, consul, Birmingham	600 00
W. B. Lovie, consul, Cardiff	101 68
J. M. Langston, consul, Hayti	750 00
J. A. Leonard, consul, Leith	600 00
E. E. Lane, consul, Tunstall	350 00
J. T. Mason, consul, Dresden	750 00
J. S. Martin, jr., consul, Marseilles	708 19
J. S. Mosby, consul, Hong-Kong	1,125 00
E. A. Merritt, consul-general, London	1,000 00
G. F. Mosher, consul, Sonneberg	500 00
F. H. Mason, consul, Basle	96 44
H. Mattson, consul, Calcutta	250 00
G. H. Owen, consul, Messina	200 00
W. P. Pierce, consul, Cienfuegos	125 25
B. F. Peixotto, consul, Lyons	750 00
J. S. Potter, consul, Crefeld	1,125 00
E. H, Plumacher, consul, Maracaibo	200 00
C. A. Phelps, consul, Prague	300 00
S. B. Packard, consul, Liverpool	1,250 00
J. L. Parish, consul, Chemnitz	375 00
J. T. Robeson, consul, Beirut	477 00
G. W. Roosevelt, consul, Bordeaux	500 00
S. P. Stearns, consul, Montreal	900 00
A. D. Shaw, consul, Manchester	750 00
W. P. Sutton, consul, Matamoros	600 00
D. H. Strother, consul, Mexico	450 00
O. M. Spencer, consul, Melbourne	750 00
A. G. Studer, consul, Singapore	781 23
Carried forward	**28,072 29**

Allowance for consular clerks, 1884—Continued.	
Brought forward	$28,072 29
To J. Smith, consul, Nottingham	300 00
W. Schoenle, consul, Barmen	600 00
E. M. Smith, consul, Mannheim	331 82
J. H. Steuart, consul, Antwerp	500 00
M. H. Twitchell, consul, Kingston	300 00
O. V. Tousley, consul, Leipsic	288 05
F. Vogeler, consul, Frankfort	750 00
T. B. Van Buren, consul-general, Kanagawa	197 25
W. L. Welsh, consul, Florence	472 50
J. R. Weaver, consul, Vienna	1,125 00
G. Walker, consul-general, Paris	1,000 00
W. B. Wells, consul, Dundee	400 00
A. B. Wood, consul, Belfast	400 00
C. B. Webster, consul, Sheffield	500 00
D. B. Warner, consul, St. John	100 00
J. M. Wilson, consul, Bremen	1,050 00
	36,386 91
Allowance for consular clerks, 1883:	
To T. Adamson, consul, Panama	195 05
C. M. Allen, consul, Bermuda	50 00
C. C. Andrews, consul, Rio de Janeiro	500 00
A. Badeau, consul, Havana	1,900 00
S. P. Bayley, consul, Palermo	300 00
J. M. Bailey, consul, Hamburg	375 00
S. H. M. Byers, consul, Zurich	150 00
M. S. Brewer, consul, Berlin	375 00
M. J. Cramer, consul, Berne	133 33
S. W. Cooper, consul, Gothenberg	31 50
G. L. Catlin, consul, Stuttgart	150 00
A. V. Dockery, consul, Leeds	100 00
O. N. Denny, consul-general, Shanghai	1,000 00
L. DeR. Du Verge, consul, St. Paul de Loando	198 91
D. C. Duncan, consul, Naples	157 50
D. Eckstein, consul, Amsterdam	100 00
C. C. Ford, consul. Sagua la Grande	66 66
W. G. Frye, consul, Halifax	201 35
P. Figyelmesy, consul, Demerara	255 10
J. J. Flinn, consul, Chemnitz	375 00
A. P. Francia, consul, Genoa	150 00
J. B. Glover, consul, Havre	375 00
W. F. Grinnell, consul, Bradford	300 00
B. Harte, consul, Glasgow	250 00
G. H. Horstman, consul, Nuremberg	250 00
A. Jourdan, consul, Algiers	100 00
W. King, consul, Birmingham	300 00
E. E. Lane, consul, Tunstall	185 00
J. A. Leonard, consul, Leith	200 00
J. M. Langston, consul, Hayti	137 52
J. S. Mosby, consul, Hong-Kong	625 00
H Mattson, consul, Calcutta	500 00
E. A. Merritt, consul, London	1,000 00
J. T. Mason, consul, Dresden	250 00
J. S. Martin, jr., consul, Marseilles	250 00
G. F. Mosher, consul, Sonneberg	250 00
H. C. Marston, consul, Malaga	100 00
S. B. Packard, consul, Liverpool	1,250 00
Carried forward	**13,086 92**

Allowance for consular clerks, 1883—Continued.		
Brought forward		$13,086 92
To W. P. Pierce, consul, Cienfuegos		68 00
B. F. Peixotto, consul, Lyons		375 00
C. A. Phelps, consul, Prague		200 00
J. S. Potter, consul, Crefeld		375 00
J. T. Robeson, consul, Beirut		159 00
F. W. Rice, consul, Colon		692 96
G. W. Roosevelt, consul, Bordeaux		312 50
W. W. Randall, consul, Sabanilla		100 00
S. P. Stearns, consul, Montreal		300 00
W. P. Sutton, consul, Matamoros		200 00
W. W. Sykes, consul, Cardiff		101 70
E. M. Smith, consul, Mannheim		150 00
W. Schoenle, consul, Barmen		200 00
J. H. Steuart, consul, Antwerp		250 00
J. Smith, consul, Nottingham		100 00
A. G. Studer, consul, Singapore		260 41
O. M. Spencer, consul, Melbourne		250 00
D. H. Strother, consul, Mexico		150 00
A. D. Shaw, consul, Manchester		375 00
M. H. Twitchell, consul, Kingston		100 00
R. W. Turpin, consul, Panama		305 06
O. V. Tousley, consul, Leipsic		250 00
H. A. Taylor, consul, Marseilles		4 09
F. Visich, consul, Trieste		10 99
F. Vogeler, consul, Frankfort		782 00
T. B. Van Buren, consul-general, Kanagawa		188 28
A. B. Wood, consul, Belfast		600 00
G. Walker, consul general, Paris		1,000 00
J. M. Wilson, consul, Bremen		1,350 00
J. R. Weaver, consul, Vienna		375 00
C. B. Webster, consul, Sheffield		250 00
W. L. Welsh, consul, Florence		150 00
W. B. Wells, consul, Dundee		200 00
F. C. Zimmerman, consul, Chemnitz		375 00
		23,646 91
Deduct repayments:		
By appropriation account	$157 91	
H. C. Marston	200 00	
		357 91
		23,289 00
Allowance for consular clerks, 1882:		
To A. B. Cobb, consul, Calcutta		127 71
J. M. Wilson, consul, Bremen		252 28
		379 99
Deduct repayment:		
By J. M. Wilson		91
		379 08
Salaries, interpreters to consulates in China, Japan, and Siam, 1884:		
To L. Bergholz, consul, Chinkiang		250 00
J. J. F. Bandinel, interpreter, Newchwang		393 75
J. P. Cowles, consul, Foochow		1,500 00
F. D. Cheshire, jr., consul, Foochow		454 86
O. N. Denny, consul-general, Shanghai		500 00
W. E. Goldsborough, consul, Amoy		562 50
Carried forward		3,661 11

Salaries, interpreters to consulates in China, Japan, and Siam, 1884—Continued.		
Brought forward		$3,661 11
To J. A. Halderman, consul, Bangkok		375 00
A. C. Jones, consul, Nagasaki		375 00
S. Merrill, consul, Jerusalem		160 50
J. S. Mosby, consul, Hong-Kong		187 50
L. W. Pilcher, consul, Tientsin		1,020 00
E. Stevens, consul, Ningpo		330 75
C. Seymour, consul, Canton		937 50
J. Stahel, consul, Osaka and Hiogo		287 66
I. F. Shepard, consul, Hankow		573 96
E. J. Smithers, consul, Chinkiang		125 00
T. B. Van Buren, consul, Kanagawa		1,000 00
J. C. Zuck, consul, Tientsin		510 00
		9,543 98
Salaries, interpreters to consulates in China, Japan, and Siam, 1883:		
To L. Bergholz, consul, Chinkiang		125 00
J. J. F. Bandinel, interpreter, Newchwang		131 25
J. P. Cowles, jr., consul, Foochow		500 00
O. N. Denny, consul-general, Shanghai		1,939 92
W. E. Goldsborough, consul, Amoy		187 50
J. A. Halderman, consul, Bangkok		187 50
A. C. Jones, consul, Nagasaki		125 00
J. S. Mosby, consul, Hong-Kong		375 00
L. W. Pilcher, consul, Tientsin		510 00
E. Stevens, consul, Ningpo		360 00
I. F. Shepard, consul, Hankow		191 32
C. Seymour, consul, Canton		312 50
J. Stahel, consul, Osaka and Hiogo		125 00
T. B. Van Buren, consul-general, Kanagawa		1,400 00
J. C. Zuck, consul, Tientsin		382 50
		6,852 49
Deduct repayment:		
By appropriation account		72 77
		6,779 72
Salaries, consular officers, not citizens, 1884:		
To A. P. Ambrose, consul, Port Louis		160 91
F. Belli, consul, Palermo		513 47
N. D. Comanos, consul, Cairo		640 16
C. A. Carrol, consul, St. Helena		44 95
J. Dittmer, consul, Stettin		75 17
A. Destruge, consul, Guayaquil		189 50
J. Hutchinson, consul, Funchal		480 42
C. A. Hirschfelder, consul, Toronto		500 00
W. Koster, jr., consul, Mannheim		97 82
W. B. Lovie, consul, Cardiff		557 72
G. F. Lincoln, consul, Aix la Chapelle		130 43
A. Moller, jr., consul, Valparaiso		283 66
F. Visich, consul, Trieste		1,500 00
A. Vial, consul, Nice		829 11
		6,033 32

1883–'84. DIPLOMATIC.

Salaries, consular officers, not citizens, 1883:		
To N. D. Comanos, consul, Cairo..		$1,695 49
A. Moller, jr., Valparaiso		397 76
F. Visich, consul, Trieste		445 06
		2,538 31
Salaries, consular officers, not citizens, 1882:		
To N. D. Comanos, consul, Cairo..		272 36
Salaries, marshals for consular courts, 1884:		
To J. A. Bigelow, consul-general, Constantinople.....		825 00
F. D. Cheshire, consul, Shanghai		500 00
O. N. Denny, consul, Shanghai		250 00
A. C. Jones, consul, Nagasaki		750 00
L. W. Pilcher, consul, Tientsin		510 00
I. F. Shepard, consul, Hankow		765 30
J. Stahel, consul, Osaka and Hiogo.....		400 00
H. S. Van Buren, marshal, Kanagawa		500 00
T. B. Van Buren, consul-general, Kanagawa		250 00
J. C. A. Wingate, consul, Foochow.....		630 97
J. C. Zuck, consul, Tientsin...		255 00
		5,636 27
Salaries, marshals for consular courts, 1883:		
To J. A. Bigelow, consul-general, Constantinople.....		275 00
J. J. F. Bandinel, marshal, Newchwang		157 50
O. N. Denny, consul, Shanghai		250 00
A. C. Jones, consul, Nagasaki.		250 00
I. F. Shepard, consul, Hankow		255 10
H. S. Van Buren, marshal, Kanagawa		250 00
J. C. Zuck, consul, Tientsin ..		255 00
		1,692 60
Deduct repayments:		
By appropriation account	$135 30	
J. J. F. Bandinel ...	157 50	
		292 80
		1,399 80
Boat and crew for consul at Osaka and Hiogo, 1884:		
To J. Stahel, consul, Osaka and Hiogo.....		79 12
Boat and crew for consul at Osaka and Hiogo, 1883:		
To J. Stahel, consul, Osaka and Hiogo		247 37
Steam launch for legation and consulate at Constantinople, 1884:		
To L. Wallace, minister, Turkey..		1,000 00
Expenses of interpreters, guard, &c., Turkish dominions, 1884:		
To N. D. Comanos, consul, Cairo..		130 62
G. H. Heap, consul-general, Constantinople.....		618 75
Morton, Rose & Co., bankers, London		500 00
S. Merrill, consul, Jerusalem..		321 00
J. T. Robeson, consul, Beirut .		477 00
W. E. Stevens, consul, Smyrna		461 77
		2,509 14
Expenses of interpreters, guards, &c., Turkish dominions, 1883:		
To G. H. Heap, consul-general, Constantinople		$206 25
W. E. Stevens, consul, Smyrna		131 00
Deduct from repayments.		337 25
By appropriation account.....	$56 25	
Morton, Rose & Co.....	624 98	
		681 23
Excess of repayments....		343 98
Loss on bills of exchange, consular service, 1884:		
To A. A. Garguilo, consul, Turkey		82
F. A. Matthews, consul, Tangier		18 00
		18 82
Loss on bills of exchange, consular service, 1883:		
To appropriation account		6,331 72
A. A. Garguilo, consul, Turkey		11 55
		6,343 27
Contingent expenses of consulates, 1884:		
To H. C. C. Astwood, consul, St. Domingo		263 97
L. T. Adams, consul, Genoa...		225 01
C. C. Andrews, consul, Rio de Janeiro		1,032 24
D. Atwater, consul, Tahiti....		38 00
C. M. Allen, consul, Bermuda..		49 77
H. L. Atherton, consul, Pernambuco		146 29
T. Adamson, consul, Panama .		494 75
L. H. Ayme, consul, Merida...		378 20
A. P. Ambrose, consul, Mannheim		41 25
B. H. Barrows, consul, Dublin		552 30
L. Bergholz, consul, Chinkiang		441 88
C. P. Barnard, consul, Leghorn		121 90
C. Bartlett, consul, Guadeloupe		132 47
W. S. Bird, consul, La Guayra.		186 03
H. M. Brent, consul, Callao ...		58 94
W. C. Burchard, consul, Ruatan		33 80
F. W. Ballow, consul, Kehl...		83 59
L. C. Bacon, consul, Samana.		12 00
M. S. Brewer, consul, Berlin.		1,243 15
S. P. Bayley, consul, Palermo		428 10
H. N. Beach, consul, Guayaquil		231 44
E. L. Baker, consul, Buenos Ayres.....		648 34
J. M. Bailey, consul, Hamburg		650 55
F. Belli, consul, Palermo.....		425 33
S. F. M. Byers, consul, Zurich		522 22
J. J. F. Bandinel, consul, Newchwang.....		94 50
C. C. Bancroft, consul, Calcutta.....		708 68
C. A. Boush, consul, Collingwood.....		14 43
N. D. Comanos, consul, Cairo.		391 87
D. J. Crain, consul, Milan...		188 76
G. L. Catlin, consul, Stuttgart		499 92
S. W. Cooper, consui, Gothenburg.....		158 00
E. Conroy, consul, St. Juan, Porto Rico.....		216 94
R. C. Campbell, consul, Monterey		57 45
G. C. Campbell, consul, Gaboon		133 10
Carried forward.....		11,905 08

1883–'84. DIPLOMATIC.

Contingent expenses of consulates, 1884—Continued.	
Brought forward	$11,905 08
To F. M. Cheney, consul, Zanzibar	46 10
P. Carroll, consul, Port Stanley	120 00
A. J. Cassard, consul, Tampico	244 55
C. A. Carroll, consul, St. Helena	145 36
T. Canisius, consul, Apia	16 11
J. G. Crawford, consul, Coaticook	232 46
F. D. Cheshire, consul, Shanghai	1,644 75
R. S. Chilton, consul, Goderich	100 17
J. T. DuBois, consul, Aix la Chapelle	260 30
A. V. Dockery, consul, Leeds	421 90
J. Dittmer, consul, Breslau	25 67
H. Davy, consul, Newcastle	100 72
J. C. Dutcher, consul, Port Hope	18 45
D. Duer, jr., consul, Lisbon	123 79
D. M. Dunn, consul, Valparaiso	471 85
S. W. Dabney, consul, Fayal	7 81
J. De Carricoste, consul, Corunna	97 15
A. Destruge, consul, Guayaquil	19 80
M. A. Elfwing, consul, Stockholm	65 09
C. Ewers, consul, Windsor	92 01
D. Eckstein, consul, Amsterdam	547 72
W. G. Frye, consul, Halifax	547 48
J. Fletcher, consul, Genoa	347 72
C. C. Ford, consul, Sagua la Grande	70 70
A. Fish, consul, St. Hyacinthe	99 23
J. L. Frisbie, consul, Rheims	47 05
B. F. Farnham, consul, Bombay	42 33
P. Figyelmesy, consul, Demerara	207 50
E. O. Fechet, consul, Paso del Norte	165 83
A. Francis, consul, Victoria	78 25
J. B. Glover, consul, Havre	416 18
W. H. Garfield, consul, Martinique	128 50
G. W. Griffin, consul, Auckland	716 57
F. G. Gade, consul, Bergen	28 00
G. Gade, consul, Christiania	41 30
W. F. Grinnell, consul, Bradford	813 06
W. E. Goldsborough, consul, Amoy	448 62
G. Gifford, consul, Basle	24 88
G. E. Hoskinson, consul, Kingston	497 47
J. F. Hazelton, consul, Hamilton	93 50
J. W. Harper, consul, Munich	223 93
G. H. Heap, consul, Constantinople	553 63
J. Hutchinson, consul, Funchal	165 79
E. Howard, consul, Hull	82 50
B. G. Haynes, consul, Cadiz	104 45
F. G. Haughwout, consul, Naples	250 60
T. Hertzberg, consul, St. Etienne	67 45
G. E. Hubbard, consul, Mayaguez	44 25
F. Hannon, consul, Stanbridge	62 72
J. A. Halderman, consul, Bangkok	148 72
Carried forward	22,225 05

Contingent expenses of consulates, 1884—Continued.	
Brought forward	$22,225 05
To G. H. Horstman, consul, Nuremberg	224 82
S. P. Hubbell, consul, St. John's	123 35
B. Harte, consul, Glasgow	496 93
R. Y. Holley, consul, Barbadoes	150 00
W. E. Howard, consul, Toronto	135 75
D. K. Hobart, consul, Windsor	69 94
O. Hatfield, consul, Batavia	151 15
C. A. Hirschfelder, consul, Toronto	135 35
H. O. Heffter, consul, Leipsic	147 64
E. Hancock, consul, Patras	45 00
E. Johnson, consul, Pictou	210 15
A. C. Jones, consul, Nagasaki	405 88
A. Jourdan, consul, Algiers	10 28
C. E. Jackson, consul, Antigua	128 94
H. M. James, consul, Port Rowan	29 29
C. Kahlo, consul, Sydney	467 76
E. G. Kelton, consul, Mazatlan,	55 65
F. J. Kieckhoefer, disbursing clerk	10,000 00
H. Keifer, consul, Stettin	6 55
W. King, consul, Birmingham	176 90
J. A. Leonard, consul, Leith	458 41
G. F. Lincoln, consul, Aix la Chapelle	281 49
M. A. Ledet, consul, Tuxpan	53 26
J. A. Lewis, consul, Sierra Leone	78 36
P. Lange, consul, St. Stephen	162 88
J. C. Landreau, consul, Santiago de Cuba	377 24
L. A. Lothrop, consul, Bristol	324 53
A. Lapoint, consul, Lambayeque	63 67
E. E. Lane, consul, Tunstall	359 20
W. B. Lovie, consul, Cardiff	190 00
J. Low, consul, Clifton	40 50
A. Livermore, consul, Londonderry	46 88
R. Locke, consul, Newcastle	176 52
H. S. Lasar, consul, Port Stanley	147 90
R. C. Morgan, disbursing clerk	40,000 00
Morton, Rose & Co., bankers, London	800 00
H. B. McKay, consul, Teneriffe	107 74
D. A. McKinley, consul, Honolulu	1,017 74
J. S. Martin, jr., consul, Marseilles	354 80
J. T. Mason, consul, Dresden	195 75
A. Mathe, consul, Sonsonate	12 50
J. A. McKnight, consul, St. Helena	79 85
T. J. McLain, jr., consul, Nassau	271 16
F. H. Moore, consul, Basle	161 46
E. A. Merritt, consul, London	2,335 33
S. Merrill, consul, Jerusalem	243 74
E. P. Mussey, consul, Mahé	84 52
T. N. Molloy, consul, St. John's, N. F	82 54
F. H. Mason, consul, Basle	707 46
G. F. Mosher, consul, Sonneberg	302 77
J. W. Merriam, consul, Iquique	60 13
W. Morey, consul, Ceylon	276 43
H. Mattson, consul, Calcutta	430 27
F. A. Matthews, consul, Tangiers	232 00
J. Mathé, consul, Sonsonate	36 75
Carried forward	85,950 16

1883–'84. DIPLOMATIC.

Contingent expenses of consulates, 1884—Continued.	
Brought forward	$85,950 16
To B. Mackey, consul, Rio Grande do Sul	34 15
H. C. Miller, consul, Guayaquil	101 22
W. E. Mayer, consul, Para	77 90
McW. B. Noyes, consul, Venice	97 76
G. H. Owen, consul, Messina	286 60
E. L. Oppenheim, consul, Cadiz	132 42
H. Pease, consul, Santiago, C. V. I	84 30
J. S. Potter, consul, Crefeld	684 86
B. F. Peixotto, consul, Lyons	1,257 49
E. H. Plumacher, consul, Maracaibo	260 20
W. A. Preller, consul, Rio Grande do Sul	20 22
A. C. Prindle, consul, Para	260 25
G. P. Pomeroy, consul, Cairo	1,113 95
W. P. Pierce, consul, Cienfuegos	337 61
B. J. Pridjeon, consul, Piedras Negras	85 55
J. J. Piatt, consul, Cork	258 71
S. D. Pace, consul, Port Sarnia	129 61
F. W. Prince, consul, Belleville	14 01
F. Paul, consul, Odessa	429 79
L. R. Peck, consul, Fort Erie	120 93
L. W. Pilcher, consul, Tientsin	643 15
C. A. Phelps, consul, Prague	121 56
S. B. Packard, consul, Liverpool	1,726 93
J. L. Parish, consul, Chemnitz	190 15
T. T. Prentiss, consul, Port Louis	345 30
D. T. Reed, consul, Madrid	75 41
A. Rhodes, consul, Elberfeld	127 45
R. B. Robbins, consul, Ottawa	192 85
L. Richmond, consul, Rome	550 44
J. T. Robeson, consul, Beirut	330 72
H. B. Ryder, consul, Copenhagen	591 39
W. T. Rice, consul, Horgen	341 08
A. L. Russell, consul, Montevideo	163 98
G. W. Roosevelt, consul, Bordeaux	370 58
C. A. Rand, consul, Sorel	61 90
S. P. Stearns, consul, Montreal	906 81
C. Seymour, consul, Canton	953 36
J. Smith, consul, Nottingham	591 36
S. Spackman, consul, Cologne	411 98
A. D. Shaw, consul, Manchester	755 73
W. Schoenle, consul, Barmen	634 76
W. P. Sutton, consul, Matamoros	903 55
N. K. Sawyer, consul, Turks Island	33 95
H. J. Sprague, consul, Gibraltar	71 69
W. E. Stevens, consul, Smyrna	489 73
V. V. Smith, consul, St. Thomas	254 87
F. H. Scheuch, consul, Barcelona	280 45
E. Stanton, consul, St. Petersburg	489 04
H. L. Slaght, consul, Prescott	150 75
H. Sterne, consul, Buda	48 75
J. A. Sutter, consul, Acapulco	293 52
L. B. Smith, consul, Curaçao	11 60
J. W Siler, consul, Cape Town	314 66
J. Stahel, consul, Hiogo	433 89
Carried forward	105,601 03

Contingent expenses of consulates, 1884—Continued.	
Brought forward	$105,601 03
To W. W. Sikes, consul, Cardiff	25 15
I. F. Shepard, consul, Hankow	484 67
A. G. Studer, consul, Singapore	382 70
E. M. Smith, consul, Mannheim	254 57
J. H. Steuart, consul, Antwerp	345 60
S. H. Smith, consul, Nuevo Laredo	47 45
O. M. Spencer, consul, Melbourne	717 51
T. Simpson	66 80
E. Stevens, consul, Ningpo	446 33
D. J. Strother, consul, Mexico	343 65
E. J. Smithers, consul, Gibraltar	283 17
O. V. Tousley, consul, Leipsic	188 72
L. C. Tanner, consul, Verviers and Liege	236 65
J. W. Taylor, consul, Winnipeg	203 31
M. H. Twitchell, consul, Kingston	255 83
B. Tzschuck, consul, Vera Cruz	806 92
J. Turner, consul, Amherstburg	57 85
S. A. Touhey, consul, Rome	11 70
F. H. Titus, consul, Guatemala	56 24
W. Thompson, consul, Southampton	141 16
W. T. Townsend, consul, Woodstock	12 00
F. Vogeler, consul, Frankfort	680 69
A. Vial, consul, Nice	117 14
E. G. Van Riper, consul, Moscow	39 05
A. Van Camp, consul, Levuka	67 85
J. Viosca, consul, La Paz	64 90
J. G. Voight, consul, Manila	85 31
J. F. Van Ingen, consul, Talcahuano	49 06
T. B. Van Buren, consul, Kanagawa	891 07
D. Vickers, consul, Matanzas	331 35
F. Visich, consul, Trieste	222 40
W. L. Welsh, consul, Florence	240 37
J. R. Weaver, consul, Vienna	768 70
J. M. Wilson, consul, Bremen	769 39
W. D. Wamer, consul, Dusseldorf	55 50
R. Wickersham, consul, Castelamare	21 77
J. Worthington, consul, Malta	272 86
T. Wilson, consul, Nantes	150 44
J. N. Wasson, consul, Quebec	342 25
W. A. Worden, consul, Charlottetown	317 39
C. P. Williams, consul, Rouen	244 56
G. Walker, consul, Paris	2,198 07
J. B. Weaver, consul, Bahia	83 06
J. C. A. Wingate, consul, Foochow	496 19
W. T. Wright, consul, Santos	31 45
A. Willard, consul, Guaymas	22 52
W. B. Wells, consul, Dundee	379 21
J. F. Winter, consul, Rotterdam	307 35
D. B. Warner, consul, St. John	305 95
A. B. Wood, consul, Belfast	1,210 73
C. B. Webster, consul, Sheffield	339 40
A. M. Wood, consul, Castelamare	23 85
A. Woodcock, consul, Batavia	154 78
J. S. Williams, consul, Aden	75 95
J. Wilson, consul, Brussels	390 50
Carried forward	122,720 07

1883–'84. DIPLOMATIC.

Contingent expenses of consulates, 1884—Continued.		
Brought forward		$122,720 07
To R. M. Whitney, consul, Tamatave		56 35
E. E. White, consul, Puerto Cabello		80 63
F. C. Zimmerman, consul, Havana		235 75
		123,092 80
Deduct repayments:		
By J. G. Crawford	$82 75	
N. D. Comanos	130 62	
C. Kahlo	100 00	
F. J. Kieckhofer	5,000 00	
R. C. Morgan	17,617 00	
		22,930 37
		100,162 43
Contingent expenses United States consulates, 1883:		
To T. Adamson, consul, Panama		181 37
S. H. M. Byers, consul, Zurich		171 44
E. L. Baker, consul, Buenos Ayres		318 68
A. Badeau, consul-general, Havana		1,210 32
C. Bartlett, consul, Guadeloupe		71 59
G. L. Catlin, consul, Stuttgart		141 93
J. G. Crawford, consul, Coaticook		62 00
T. Canisius, consul, Apia		280 45
S. W. Cooper, consul, Gothenberg		64 50
D. J. Crain, consul, Milan		34 29
A. J. De Zeyk, consul, Turin		257 19
L. De R. Do Verge, consul, St. Paul de Loando		239 96
B. O. Duncan, consul, Naples		137 50
H. P. Dill, consul, Guelph		11 39
A. Destruge, consul, Guayaquil		224 97
D. Eickstein, consul, Amsterdam		131 32
C. Ewers, consul, Windsor		54 00
C. C. Ford, consul, Sagua la Grande		96 18
A. P. Francia, consul, Genoa		91 14
J. Farrell, consul, Bristol		204 32
J. B. Glover, consul, Havre		194 21
G. E. Hoskinson, consul, Kingston		375 48
O. Hatfield, consul, Batavia		45 38
D. K. Hobart, consul, Windsor		58 34
S. P. Hubbell, consul, St. John's		70 48
C. Kahlo, consul, Sydney		288 76
W. Köster, jr., consul, Mannheim		15 06
W. H. King, consul, Port Stanley		20 00
J. A. Leonard, consul, Leith		134 80
E. A. Merritt, consul, London		1,888 99
H. Mattson, consul, Calcutta		1,056 72
J. S. Martin, consul, Marseilles		69 43
F. H. Mason, consul, Basle		419 06
J. A. MacKnight, consul, St. Helena		84 29
G. F. Mosher, consul, Sonneberg		178 10
H. C. Marston, consul, Malaga		345 93
G. Nye, consul, Canton		105 00
S. B. Packard, consul, Liverpool		973 30
W. A. Preller, consul, Rio Grande do Sul		33 51
G. P. Pomeroy, consul, Cairo		477 53
A. C. Prindle, consul, Para		89 25
Carried forward		10,908 16

Contingent expenses of consulates, 1883—Continued.		
Brought forward		$10,908 16
To W. P. Pierce, consul, Cienfuegos		98 14
E. H. Plumacher, consul, Maracaibo		50 00
T. T. Prentiss, consul, Port Louis		122 04
F. W. Rice, consul, Colon		883 30
O. M. Spencer, consul, Melbourne		207 89
C. Seymour, consul, Canton		525 70
S. H. Smith, consul, Laredo		42 89
E. M. Smith, consul, Mannheim		109 50
E. J. Smithers, consul, Chinkiang		41 66
A. D. Shaw, consul, Manchester		350 26
M. H. Twitchell, consul, Kingston		40 57
B. Tzschuck, consul, Vera Cruz		246 08
R. W. Turpin, consul, Panama		303 75
G. C. Tanner, consul, Liege		108 46
F. Vogeler, consul, Frankfort		214 25
D. Vickers, consul, Matanzas		213 10
T. B. Van Buren, consul, Kanagawa		377 23
J. F. Van Ingen, consul, Talcahuano		12 27
A. B. Wood, consul, Belfast		556 82
G. Walker, consul, Paris		1,097 71
J. S. Williams, consul, Aden		114 56
W. T. Wright, consul, Santos		10 48
W. L. Welsh, consul, Florence		157 75
J. M. Wilson, consul, Bremen		196 59
A. G. Webster, consul, Hobart		61 33
A. Willard, consul, Guaymas		25 87
		17,076 36
Deduct repayments:		
By appropriation account	$1,327 81	
S. H. M. Byers	24 00	
O. N. Denny	9 10	
A. J. De Zeyk	84 00	
C. C. Ford	66 66	
R. C. Morgan	5,500 00	
F. H. Mason	22 50	
Morton, Rose & Co	132 59	
G. P. Pomeroy	250 00	
W. W. Sikes	58 47	
		7,475 13
		9,601 23
Contingent expenses United States consulates, 1882:		
To J. C. Kretchmar, consul, San Juan del Norte		58 35
W. W. Randall, consul, Sabanilla		53 60
J. M. Wilson, consul, Bremen		140 77
		252 72
Contingent expenses United States consulates, 1881 and prior years:		
By A. V. Dockery	$101 33	
R. C. Morgan	2,242 44	
J. Mathe	76 00	
F. Paul	8 50	
		2,428 27
Rent of prisons, wages of keepers, &c., for American convicts in Siam and Turkey, 1884:		
To J. A. Halderman, consul, Bangkok		450 00
W. E. Stevens, consul, Smyrna		309 43
		759 43

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Contingent expenses Post-Office Department, miscellaneous items, 1884:		
To J. O. P. Burnside	$12,000 00	
Deduct repayment:		
By J. O. P. Burnside	3,000 00	
	9,000 00	
Contingent expenses, Post-Office Department, rent, 1884:		
To J. O. P. Burnside	9,500 00	
Contingent expenses, Post-Office Department, publication of Official Postal Guide, 1884:		
To J. O. P. Burnside	29,000 00	
Deficiency in the postal revenues, 1884:		
To Post-Office Department	135,941 26	
Deduct repayment:		
By Post-Office Department	135,941 26	
Deficiency in the postal revenues, 1883:		
To Post-Office Department	35,465 35	
Deduct repayment:		
By Post-Office Department	35,465 35	
Publication of post-route maps, 1884:		
To J. O. P. Burnside	15,000 00	
Post-Office Department building, refitting rooms:		
By J. O. P. Burnside	$530 37	
Salaries, Department of Agriculture, 1884:		
To G. B. Loring	127,500 00	
Salaries, Department of Agriculture, 1883:		
To G. B. Loring	175 49	
Collecting agricultural statistics, 1884:		
To G. B. Loring	79,500 00	
Purchase and distribution of valuable seeds, 1884:		
To G. B. Loring	75,000 00	
Museum, Department of Agriculture, 1884:		
To G. B. Loring	1,000 00	
Museum, Department of Agriculture, 1883:		
To G. B. Loring	500 00	
Experimental garden, Department of Agriculture, 1884:		
To G. B. Loring	7,200 00	
Laboratory, Department of Agriculture, 1884:		
To G. B. Loring	16,800 00	
Furniture, cases, and repairs, Department of Agriculture, 1884:		
To G. B. Loring	6,000 00	
Library, Department of Agriculture, 1884:		
To G. B. Loring	1,500 00	
Investigating the history of insects injurious to agriculture, 1884:		
To G. B. Loring	19,000 00	
Sioux City and Pacific R.R.Co.	1 94	
Union Pacific R. R. Co	115 00	
	19,116 94	
Investigating the history of insects injurious to agriculture, 1882 and 1883:		
To G. B. Loring	$288 46	
Sioux City and Pacific R.R.Co.	3 30	
Union Pacific R. R. Co	61 40	
	353 16	
Investigating diseases of domesticated animals, 1884:		
To J. Law	871 08	
G. B. Loring	22,500 00	
J. H. Sanders	927 33	
	24,298 41	
Investigating the diseases of swine and other domesticated animals, 1883:		
To G. B. Loring	3,055 73	
J. H. Sanders	528 55	
	3,584 28	
Reclamation of arid and waste lands:		
To Baltimore and Ohio R. R. Co	33 50	
Kansas Pacific R. R. Co	24 26	
G. B. Loring	15,838 50	
Union Pacific R. R. Co	66 99	
	15,963 25	
Report on Forestry, 1884:		
To Chicago, Milwaukee and Saint Paul Railway Company	12 50	
G. B. Loring	9,892 50	
Oregon Railway and Navigation Company	95 00	
	10,000 00	
Report on Forestry, 1883:		
To Central Pacific R. R. Co	83 04	
G. B. Loring	1,679 99	
Union Pacific	114 00	
	1,877 03	
Contingent expenses, Department of Agriculture, 1884:		
To G. B. Loring	13,500 00	
Postage, Department of Agriculture, 1884:		
To G. B. Loring	3,800 00	
Postage, Department of Agriculture, 1883:		
To G. B. Loring	177 49	
Improvement of grounds, Department of Agriculture:		
To G. B. Loring	8,000 00	
Experiments in the manufacture of sugar:		
To G. B. Loring	5,454 60	
Building, Department of Agriculture:		
To G. B. Loring	2,500 00	
Experiments in the culture of tea, 1883:		
To G. B. Loring	505 66	
Examination of woods and animal fibers, 1882 and 1883:		
To G. B. Loring	264 04	
Transporting for permanent exhibition certain agricultural and mineral specimens exhibited:		
To G. B. Loring	600 00	

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Salaries, justices, &c., Supreme Court U. S., 1884:		
To S. Blatchford, associate justice	$10,000 00	
J. P. Bradley, associate justice	10,000 00	
S. J. Field, associate justice...	10,000 00	
H. Gray, associate justice ...	10,000 00	
J. M. Harlan, associate justice.	10,000 00	
S. Matthews, associate justice	10,000 00	
J. G. Nicolay, marshal.....	3,000 00	
S. F. Miller, associate justice .	10,000 00	
M. R. Waite, Chief Justice ...	10,500 00	
W. B. Wood. associate justice.	10,000 00	
	93,500 00	
Salaries and expenses, office of Supreme Court, 1883 and 1884:		
To H. C. McKenny	8,000 00	
Salaries of circuit judges, 1884:		
To J. Baxter, Tennessee.....	6,000 00	
H. L. Bond, Maryland.....	6,000 00	
D. J. Brewer	1,384 62	
T. Drummond, Illinois.....	6,000 00	
J. Lowell, Massachusetts	4,994 50	
G. W. McCrary, Iowa	3,989 00	
W. McKennan, Pennsylvania.	6,000 00	
D. A. Pardee, Louisiana	6,000 00	
L. Sawyer, California	6,000 00	
W. J. Wallace, New York ...	6,000 00	
	52,368 12	
Salaries of retired United States judges, 1884:		
To A. Boarman	285 40	
J. Erskine.....	1,750 00	
W. Hunt	10,000 00	
J. P. Knowles	3,500 00	
E. G. Loring.....	4,500 00	
A. Rives	3,500 00	
W. Strong	10,000 00	
N. H. Sawyer.....	9,175 80	
	42,711 20	
Salaries of district judges, 1884:		
To M. W. Acheson, Pennsylvania	4,000 00	
J. W. Barr, Kentucky	3,500 00	
C. L. Benedict, New York....	4,000 00	
E. C. Billings, Louisiana.....	4,500 00	
H. W. Blodgett, Illinois	4,000 00	
E. G. Bradford, Delaware	1,903 85	
A. Brown, New York	4,000 00	
H. B. Brown, Michigan.....	3,500 00	
A. Boarman, Louisiana.....	3,214 60	
J. Bruce, Alabama	3,500 00	
G. S. Bryan, South Carolina..	3,500 00	
R. Bunn, Wisconsin	3,500 00	
W. Butler, Pennsylvania.....	4,000 00	
H. C. Caldwell, Arkansas	3,500 00	
L. B. B. Colt, Rhode Island ..	3,500 00	
D. Clark, New Hampshire ...	3,500 00	
A. C. Coxe, New York	4,000 00	
M. P. Deady, Oregon	3,500 00	
R. P. Dick, North Carolina...	3,500 00	
E. S. Dundy, Nebraska	3,500 00	
C. E. Dyer, Wisconsin	3,500 00	
J. Erskine, Georgia	1,750 00	
C. G. Foster, Kansas	3,500 00	
M. Hallett, Colorado	3,500 00	
E. S. Hammond, Tennessee ..	3,500 00	
R. A. Hill, Mississippi.....	3,500 00	
O. Hoffman, California.....	5,000 00	
R. W. Hughes, Virginia	3,500 00	
J. J. Jackson, jr., West Virginia	3,500 00	
D. M. Key, Tennessee.....	3,500 00	
A. Krekel, Missouri.....	3,500 00	
J. W. Locke, Maine	3,500 00	
J. M. Love, Iowa	3,500 00	
H. K. McCay, Georgia...	3,500 00	
Carried forward.....	120,868 45	

Salaries of district judges, 1884—Continued.		
Brought forward.....	$120,868 45	
To A. P. McCormick, Texas	3,500 00	
A. Morrill, Texas	2,673 08	
T. J. Morris, Maryland	4,000 00	
R. R. Nelson, Minnesota.....	3,500 00	
T. L. Nelson, Massachusetts.	4,000 00	
J. T. Nixon, New Jersey	4,000 00	
I. C. Parker.....	3,500 00	
J. Paul.....	2,872 28	
G. M. Sabin, Nevada	3,500 00	
G. R. Sage, Ohio.....	4,000 00	
T. Settle, Florida.....	3,500 00	
A. S. Seymour	3,500 00	
N. Shipman, Connecticut	3,500 00	
O. P. Shiras, Iowa.....	3,500 00	
S. H. Treat, Illinois	3,500 00	
S. Treat, Missouri.....	3,500 00	
E. B. Turner, Texas.....	3,500 00	
L. E. Wales	903 85	
N. Webb, Maine.....	3,500 00	
M. Welker, Ohio	3,500 00	
H. H. Wheeler, Vermont.....	3,500 00	
S. L. Withey, Michigan.....	3,500 00	
W. A. Woods.....	3,500 00	
C. B. Sabin	740 35	
	200,058 01	
Deduct repayment:		
By Treasurer United States.....	298 10	
	199,759 91	
Salaries of district judges, 1883:		
To W. A. Woods.....	519 27	
Salaries justices of the supreme court District Columbia, 1884:		
To D. K. Cartter, chief justice ..	4,500 00	
W. S. Cox.....	4,000 00	
A. B. Hagner	4,000 00	
C. P. James	4,000 00	
A. MacArthur.....	4,000 00	
A. Wylie.....	4,000 00	
	24,500 00	
Salaries district attorneys, 1884:		
To J. B. Allen, Washington.....	250 00	
J. C. Bigger, Texas	200 00	
W. H. Bliss, Missouri	150 00	
J. E. Boyd, North Carolina...	200 00	
A. W. Brazee, Colorado	200 00	
M. C. Brown	204 67	
C. H. Burns, New Hampshire.	200 00	
H. J. Campbell, Dakota	250 00	
D. Chadwick, Connecticut....	200 00	
G. C. Chandler, Mississippi..	200 00	
E. M. Cheney, Florida.....	200 00	
W. H. H. Clayton, Arkansas.	200 00	
T. Coffin, Nevada	200 00	
J. A. Connelly.....	200 00	
G. B Corkhill	106 59	
S. M. Cutcheon, Michigan....	200 00	
S. A. Darnell, Georgia	200 00	
W. H. DeWitt, Montana.....	250 00	
N. F. Dixon, jr., Rhode Island	200 00	
W. H. Dickson	75 55	
G. M. Derskin, Alabama.....	200 00	
E. H. Eggleston, Ohio	200 00	
M. C. Elstner, Louisiana	200 00	
A. J. Evans, Texas	200 00	
W. H. H. Flick, West Virginia	200 00	
E. Guthridge, Texas	100 00	
J. R. Hallowell, Kansas.....	200 00	
K. Haskins, Vermont.....	200 00	
G. W. Hazelton, Wisconsin...	200 00	
S. G. Gilbourn, California	500 00	
C. L. Holstein, Indiana.....	200 00	
A. Q. Keasbey, New Jersey..	200 00	
G. M. Lambertson, Nebraska.	200 00	
Carried forward.....	6,686 81	

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Salaries, district attorneys, 1884—Continued.		
Brought forward		$6,686 81
To L. Lea, Mississippi		200 00
J. B. Leake, Illinois		100 00
A. H. Leonard, Louisiana		200 00
D. S. Lewis, Virginia		200 00
H. M. Lewis, Wisconsin		200 00
W. F. Lunt, Maine		200 00
A. McClain, Tennessee		200 00
J. M. Meek, Tennessee		200 00
S. W. Meton, South Carolina		200 00
M. D. O'Connell, Iowa		200 00
G. B. Patterson, Florida		200 00
J. C. Patterson, Delaware		200 00
G. Paschel		80 93
W. F. Poston, Tennessee		200 00
G. W. Prichard, New Mexico		250 00
C. Richards, Ohio		200 00
J. A. Riner		45 33
W. S. O. B. Robinson, North Carolina		200 00
E. Root, New York		6,000 00
J. S. Runnells, Iowa		200 00
G. P. Sanger, Massachusetts		200 00
D. B. Searle, Minnesota		200 00
W. H. Smith, Alabama		200 00
E. Speer		200 00
A. Sterling, jr., Maryland		200 00
J. W. Stone, Michigan		200 00
W. A. Stone, Pennsylvania		200 00
A. E. Stratton		26 37
A. W. Tenney		200 00
G. M. Thomas		200 00
M. I. Townsend		200 00
R. S. Tuthill		75 27
J. K. Valentine, Pennsylvania		200 00
P. T. Van Zile, Utah		174 45
E. Waddill, jr., Virginia		200 00
C. C. Waters		200 00
J. F. Watson, Oregon		200 00
W. Warner, Missouri		200 00
W. R. White, Idaho		250 00
A. S. Worthington		84 62
J. A. Zabviski, Arizona		250 00
	20,023 78	
Deduct repayment:		
By J. B. Leake	7 70	
	20,016 08	
Salaries, district attorneys, 1883:		
To W. H. DeWitt		65 97
E. H. Eggleston		59 44
G. W. Prichard		71 53
E. Speer		72 20
	269 14	
Salaries, district attorneys, 1882:		
To W. S. Lurty		40 00
Salaries, district marshals, 1884:		
To H. Allen, Dakota		200 00
G. W. Atkinson, West Virginia		200 00
A. J. Auxier, Kentucky		200 00
E. L. Bierbower, Nebraska		200 00
G. D. Bisbee, Maine		200 00
T. Boles, Arkansas		200 00
A. C. Botkin, Montana		200 00
A. Blythe		100 00
J. H. Coggeshall, Rhode Island		200 00
P. S. Corbett, Nevada		200 00
F. Coste, Missouri		200 00
W. B. Deacon, New Jersey		200 00
H. R. Denny, Minnesota		200 00
M. M. Drew, California		500 00
F. T. DuBois, Idaho		200 00
J. H. Durkee, Florida		200 00
H. Fink, Wisconsin		200 00
Carried forward	3,600 00	

Salaries, district marshals, 1884—Continued.		
Brought forward		$3,600 00
To R. S. Foster, Indiana		200 00
W. G. M. Golsom		7 69
W. F. Goodspeed		200 00
H. L. Gosling, Texas		200 00
W. W. Henry, Vermont		200 00
J. B. Hill, North Carolina		400 00
J. M. Hinds, Alabama		250 00
C. Hopkins, Washington		200 00
R. P. Hughes, Virginia		200 00
E. A. Ireland, Utah		200 00
A. M. Jones, Illinois		150 00
K. S. Kearney		150 00
T. B. Keogh, North Carolina		200 00
J. C. Kinney, Connecticut		200 00
J. H. Livingston, South Carolina		130 39
C. D. MacDougall, New York		200 00
S. S. Mathews, Michigan		200 00
J. H. McGee, Missouri		200 00
J. A. McKee, Texas		200 00
H. H. McMullen, Delaware		200 00
J. Monroe, Michigan		200 00
J. L. Morphis, Mississippi		200 00
A. L. Morrison, New Mexico		200 00
J. N. Patterson, New Hampshire		200 00
G. D. Perkins, Iowa		200 00
W. J. Phillips, Texas		150 00
J. R. J. Pitkin, Louisiana		200 00
F. W. Oakley, Wisconsin		200 00
W. C. Raum, Mississippi		200 00
T. H. Reeves, Tennessee		200 00
R. Root, Iowa		200 00
D. B. Russell, Arkansas		200 00
J. S. Rutan, Pennsylvania		200 00
G. Schnitger, Wyoming		200 00
B. F. Simpson, Kansas		200 00
W. A. Smith, Colorado		200 00
J. H. Speed		13 74
P. Strobach, Alabama		150 00
J. R. Tanner		119 02
A. C. Tate		200 00
Z. L. Tidball, Arizona		200 00
G. N. Tillman, Tennessee		200 00
J. G. Tracy		29 67
T. J. Tuomey		56 59
J. G. Watts, Virginia		200 00
J. C. Weaks, Louisiana		200 00
J. Wheeler, Illinois		50 00
P. A. Williams, Florida		200 00
M. T. Williamson, Tennessee		200 00
L. Wright, Ohio		200 00
	12,657 10	
Salaries, district marshals, 1883:		
To R. M. Douglas, North Carolina		39 44
T. B. Keogh, North Carolina		60 56
J. H. McGee, Missouri		56 11
M. C. Osborn, Alabama		42 22
D. B. Russell, Arkansas		86 82
P. Strobach, Alabama		51 11
J. C. Ullery, Ohio		46 67
L. Wright, Ohio		53 33
	436 26	
Salaries and expenses of reporter of Supreme Court United States:		
To J. C. B. Davis		6,900 00
W. T. Otto		1,800 00
	8,700 00	
Salaries, Department of State, 1884:		
To F. J. Kieckhoefer		46,033 42
R. C. Morgan		65,898 17
A. U. Wyman		9,567 40
Carried forward	121,498 99	

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Salaries, Department of State, 1884—Continued.
Brought forward $121,498 99
Deduct repayments:
By R. C. Morgan $9,842 10
A. U. Wyman 255 40
10,097 50
111,401 49

Salaries, Department of State, 1883:
By R. C. Morgan $49 45

Contingent expenses, Department of State, proof-reading, 1884:
To F. J. Kieckhoefer 600 00
R. C. Morgan 500 00
1,100 00
Deduct repayment:
By R. C. Morgan 20 00
1,080 00

Contingent expenses, Department of State, proof-reading, 1883:
By R. C. Morgan $506 37

Contingent expenses, Department of State, lithographing, 1884:
To F. J. Kieckhoefer 670 39
R. C. Morgan 1,000 00
1,670 39
Deduct repayment:
By R. C. Morgan 513 92
1,156 47

Contingent expenses, Department of State, proof-reading, 1883:
By R. C. Morgan $128 11

Contingent expenses, Department of State, stationery and furniture, 1884:
To F. J. Kieckhoefer 1,746 71
R. C. Morgan 3,500 00
5,246 71
Deduct repayment:
By R. C. Morgan 246 71
5,000 00

Stationery and furniture, &c., Department of State, 1883:
To R. C. Morgan 206 58

Postage, Department of State, 1884:
To Post-Office Department 2,440 00

Postage, Department of State, 1883:
To Post-Office Department 670 00

Editing, publishing, and distributing Revised and Annual Statutes, 1884:
To R. C. Morgan 4,000 00

Editing, publishing, and distributing Revised and Annual Statutes:
To R. C. Morgan 308 77

Removal and rearrangement of records, Department of State, 1883 and 1884:
By R. C. Morgan $80 96

Contingent expenses, Department of State, books and maps, 1884:
To F. J. Kieckhoefer 1,276 81
R. C. Morgan 2,000 00
Carried forward 3,276 81

Contingent expenses, Department of State, books and maps, 1884—Continued.
Brought forward $3,276 81
Deduct repayment:
By R. C. Morgan 276 81
3,000 00

Contingent expenses, Department of State, books and maps, 1882:
To F. J. Kieckhoefer 548 86
Deduct repayment:
By T. T. Dwight 516 68
32 18

Contingent expenses, Department of State, 1884:
To F. J. Kieckhoefer 2,500 00
R. C. Morgan 2,320 77
4,820 77
Deduct repayment:
By F. J. Kieckhoefer 20 77
4,800 00

Contingent expenses, Department of State, 1883:
By R. C. Morgan $32 00

Contingent expenses, Department of State, 1881 and prior years:
By R. C. Morgan $200 00

Observance of the centennial anniversary of the surrender of Lord Cornwallis at Yorktown, Va.:
To R. C. Morgan 998 59
Deduct repayment:
By R. C. Morgan 669 67
328 92

Purchase of the Franklin collection of books and papers:
By R. C. Morgan $86 89

Transmission of certain books and mementoes to National Lincoln Monument Association of Springfield, Ill.:
To R. C. Morgan 24 15

Salaries, Steamboat Inspection Service:
To G. A. Bartlett 199,000 00

Contingent expenses, Steamboat Inspection Service:
To Adams Express Company 27 65
J. H. Allison 299 40
American Steam Gauge Company 54 00
L. V. Applegate 491 10
W. Applegate 89 95
G. H. Atkinson 29 95
G. Aukirard 60 00
C. Bagg 1 50
A. Bailey 104 62
E. P. Beckwith 1,198 99
G. S. Bell 352 15
F. W. Belz 3 27
C. C. Bemis 432 25
A. L. Berne 51 00
G. J. Blakeslee 286 65
C. D. Blanchard 610 26
H. O. Brazee 559 50
L. Brainard 525 08
A. Brockman 1 50
C. H. Buckelew 155 45
T. B. Burch 154 54
F. Burnett 1,148 59
Carried forward 6,637 40

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Contingent expenses, Steamboat Inspection Service—Continued.		
Brought forward	$6,637	40
To A. Burnham	257	10
Bureau of Engraving and Printing	226	20
J. W. Burke	390	00
J. T. Butler	278	99
A. Caldwell	69	32
Central Pacific R. R. Co	73	68
J. Chamberlain	1	50
R. Chestnut	53	19
R. Christian	1	50
Chicago and Northwestern Rwy. Co	1	16
Chicago, Rock Island and Pacific R. R. Co	5	82
A. R. Cole	295	20
J. Cook	607	79
W. W. Corcoran	39	66
J. A. Cotter	284	00
H. Coyne	36	35
W. Craig	114	02
P. Cramp	188	53
G. M. Cowan	253	55
J. Denham	26	15
D. P. Dey	35	89
H. H. Devenny	128	35
G. B. Dickson	55	19
A. Dodge	276	33
J. A. Dumont	498	17
J. E. Dunbar	363	00
J. W. Dyer	428	10
O. Eadger	1	50
J. Edgecomb	1	50
H. Eggert	1	80
S. G. Fairchild	160	30
J. Fehrenbatch	1,351	77
J. L. Ferguson	1,052	40
W. Fitzgerald	600	47
T. Fitzpatrick	145	12
C. M. Fellows	1	50
F. Ford	119	25
M. D. Flower	902	59
J. H. Freman	75	00
D. Fry	363	38
S. S. Garrett	1,038	35
R. Gaul	114	77
J. Gilson	24	33
G. W. Girdon	558	07
C. M. Gooding	543	99
A. Gordon	358	15
H. W. Granger	32	55
F. L. Hand	284	28
F. Harringes	1	50
C. S. Harvey	205	48
H. D. Headman	868	56
L. C. Hersberger	393	30
E. E. Hewes	376	95
J. Hillman	87	00
T. D. Hinckley	197	50
G. A. Houghton	112	90
P. B. Hovey	1,202	43
E. S. Jones	289	60
P. Jones	933	18
W. Kirkwood	165	31
R. Learmouth	151	98
J. E. Lee	95	62
F. Leighton	278	95
A. B. Linker	297	41
J. Lotan	377	90
L. Martin	148	93
C. D. MacDougall	18	50
J. Mather	82	80
J. K. Mathews	247	68
I. D. McClenan	120	00
J. Meushaw	504	98
J. Mershon	458	00
J. F. McClain	183	80
A. Moore	155	25
S. H. Moore	212	40
G. W. Moffett	507	00
F. Moore	155	60
Carried forward	28,187	72

Contingent expenses, Steamboat Inspection Service—Continued.		
Brought forward	$28,187	72
To H. E. Morgan	451	00
J. Morgan	1	50
J. R. Neeld	39	08
G. L. Norton	763	09
J. W. Oast	331	39
H. C. Pearson	324	90
Pennsylvania Company	3	24
G. A. Pollister	239	35
H. J. Porter	100	00
J. Ralston	998	75
D. C. Reed	315	50
W. H. Riddle	581	50
L. K. Rochelaux	1	50
A. J. Savage	952	73
W. O. Saville	284	59
J. Schaffer	360	80
F. A. Scott	632	60
J. G. Scott	792	33
H. Scott	185	85
F. A. Severance	1	50
W. Sheffer	192	00
G. H. Starbuck	768	97
C. Staples, jr	775	10
J. H. Stephens	187	95
J. Stork	263	79
B. A. Stanard	128	50
J. H. Strickland	215	48
A. Stowell	39	69
The Ashcroft Manufacturing Company	48	00
P. Toglio	227	74
Treasury Department	1,877	99
Union Pacific R. R. Co	14	65
L. Valentine	140	66
T. N. Van Valkenburgh	1,211	44
A. F. Warburton	375	25
J. B. Warren	194	75
R. J. White	35	45
G. W. Wilmurt	114	65
T. C. Wilson	99	35
P. Wise	367	05
H. Young	77	35
	42,904	73
Deduct repayment:		
By F. N. Shurtleff	10	00
	42,894	73
Court-house and post-office, &c., Abingdon, Va.:		
To G. A. Bartlett	150	50
Court-house and post-office, Austin, Tex.:		
By P. M. Ruthrauff	$0	08
Court-house and post-office, Atlanta, Ga.:		
To G. A. Bartlett	1,140	79
Post-office and subtreasury at Boston, Mass.:		
To G. A. Bartlett	9,320	13
M. P. Kennard	182,452	04
Treasury Department	26	73
	191,798	90
Post-office, &c., Brooklyn, N. Y.:		
To G. A. Bartlett	65	40
L. Moody	408,500	00
	408,565	40
Post-office, court-house, &c., Baltimore, Md.:		
To G. A. Bartlett	17,404	72
Treasury Department	44	03
E. H. Webster	132,000	00
	149,448	75

1883–'84. CIVIL.

Court-house, post-office, &c., Charleston, W. Va.:		
To G. A. Bartlett	$1 75	
L. H. Ewart	13,000 00	
		13,001 75
Court-house, post-office, &c., Columbus, Ohio:		
To G. A. Bartlett	4,381 96	
L. D. Myers	24,000 00	
C. Richards	750 00	
Treasury Department	20 50	
		29,152 46
Post-office, &c., Council Bluffs, Iowa:		
To G. A. Bartlett	489 50	
P. Armour	6,000 00	
Treasury Department	19 15	
		6,508 65
Post-office at Dover, Del.:		
To G. A. Bartlet	35 84	
Court-house and post-office at Covington, Ky.:		
To G. A. Bartlett	47 75	
Deduct from repayment:		
By D. W. McClung	162 04	
Excess of repayment		114 29
Post-office, court-house, &c., Concord, N. H.:		
To G. H. Bartlett	821 38	
L. H. Carroll	5,000 00	
H. Knight	5,500 00	
J. B. Marston	2,800 00	
C. E. & N. J. Mead and W. J. Mason	8,275 00	
C. E. Mead	5,000 00	
C. E. Mead and Cornelia W. Mead	6,000 00	
W. G. Perley	24,700 00	
		58,096 38
Court-house and post-office, Des Moines, Iowa:		
To G. A. Bartlett	2,412 39	
G. H. Maish	10,000 00	
		12,412 39
Court-house, post-office, &c., Detroit, Mich.:		
To G. A. Bartlett	2,763 40	
W. Livingstone, jr	10,000 00	
Treasury Department	30 73	
		12,794 13
Court-house and post-office at Danville, Va.:		
By T. J. Hobbs	$24 42	
Court-house, post-office, &c., at Denver, Colo.:		
To G. A. Bartlett	510 00	
H. A. W. Tabor	65,000 00	
		65,510 00
Court-house, post-office, &c., at Dallas, Tex.:		
To G. A. Bartlett	562 50	
M. Burke	1,000 00	
J. H. Bryan	5,000 00	
L. S. Garrison	5,000 00	
J. Geemen	8,000 00	
Carried forward	19,562 50	

Court-house, post-office, &c., at Dallas, Tex.—Continued.		
Brought forward	19,562 50	
Deduct repayment:		
By Treasurer United States	5,000 00	
		14,562 50
Court-house, post-office, &c., Erie, Pa.:		
To G. A. Bartlett	799 15	
H. C. Stafford	5,000 00	
		5,799 15
Court-house, post-office, &c., Fort Wayne, Ind.:		
To G. A. Bartlett	261 95	
First Presbyterian Church	25,000 00	
		25,261 95
Court-house and post-office at Frankfort, Ky.:		
To G. A. Bartlett	2,190 44	
J. G. Hatchitt	25,000 00	
Treasury Department	27 86	
		27,218 30
Court-house and post-office at Grand Rapids, Mich.:		
To G. A. Bartlett	464 00	
Court-house, post-office, &c., Greensburg, N. C.:		
To G. A. Bartlett	400 00	
W. B. Bogart	3,163 64	
D. F. Caldwell	8,236 36	
W. R. Meunay	1,600 00	
		13,400 00
Court-house, post-office, &c., Harrisonburg, Va.:		
To G. A. Bartlett	3 00	
W. B. Compton	4,000 00	
H. Shackett	4,000 00	
The Baptist Church, Harrisonburg, Va	4,000 00	
		12,003 00
Post-office, &c., Hannibal, Mo.:		
To D. & Kate Archdeacon	2,500 00	
J. M. Armstrong	10,000 00	
G. A. Bartlett	1,115 50	
		13,615 50
Court-house and post-office at Harrisburg, Pa.:		
To G. A. Bartlett	314 18	
Deduct from repayment:		
By M. W. McAlarney	1,396 13	
Excess of repayment		1,081 95
Court-house and post-office at Indianapolis, Ind.:		
To G. A. Bartlett	45 00	
Court-house and post-office at Jackson, Miss.:		
To G. A. Bartlett	3,331 18	
J. Hill	39,000 00	
Treasury Department	24 65	
		42,355 83
Court-house, post-office &c., Jackson, Tenn.:		
To G. A. Bartlett	42 00	
Caroline Barnhill	1,000 00	
Carried forward		1,042 00

1883–'84. CIVIL.

Court-house, post-office, &c., Jackson, Tenn—Continued.		
Brought forward		$1,042 00
To Caroline Barnhill and Jane Hafelé		1,000 00
C. A. & H. W. McCorry		4,500 00
W. F. Poston		300 00
		6,842 00
Post-office, Jersey City, N. J.:		
To G. A. Bartlett		1,758 20
Court-house, post-office, &c., Jefferson City, Mo.:		
To G. A. Bartlett		320 95
H. Burger		1,500 00
B. H. McCarty		6,100 00
J. Steinniger		5,000 00
W. Warner		281 60
V. Zuber		2,400 00
		15,602 55
Court-house, post-office, &c., Lynchburg, Va.:		
To G. A. Bartlett		261 75
William Owens, deceased		13,500 00
		13,761 75
Court-house and post-office, Little Rock, Ark.:		
To H. M. Cooper		496 39
Deduct repayment:		
By E. Wheeler		236 78
		259 61
Court-house, post-office, &c., Leavenworth, Kans.:		
To G. A. Bartlett		31 50
M. H. Insley and J. L. Byers		10,000 00
		10,031 50
Court-house and post-office at Lincoln, Nebr.:		
To G. A. Bartlett		41 82
Deduct from repayment:		
By D. D. Muir		126 78
Excess of repayment		84 96
Court-house, post-office, &c., Louisville, Ky.:		
To G. A. Bartlett		329 10
Post-office, &c., Minneapolis, Minn.:		
To G. A. Bartlett		4,425 17
O. M. Laraway		10,000 00
Chicago and Northwestern R. R. Co		1 28
J. S. Pillsbury		50,000 00
Treasury Department		27 52
The Pennsylvania Company		1 81
		64,455 78
Court-house and post-office, Montgomery, Ala.:		
To G. A. Bartlett		774 39
A. Bingham		20,000 00
F. M. Shouse		21,000 00
Treasury Department		2 89
		41,777 28
Deduct repayment:		
By F. M. Shouse		7,226 61
		34,550 67
Court-house and post-office, Marquette, Mich.:		
To H. R. Adams		$7,000 00
G. A. Bartlett		259 00
J. W. Stone		200 00
		7,459 00
Court-house and post-office, New York, N. Y.:		
To G. A. Bartlett		155 00
Deduct from repayment:		
By J. G. Hill		804 93
Excess of repayment		649 93
Court-house, post-office, &c., Oxford, Miss.:		
To G. A. Bartlett		126 90
B. C. Fee		2,500 00
S. G. Price		1,200 00
K. G. and Mary A. Thompson		2,250 00
W. P. Withers		50 00
		6,126 90
Post-office and court-house at Philadelphia, Pa.:		
To G. A. Bartlett		6,603 38
J. F. Hartranft		87 95
H. S. Huidekoper		375,110 45
Treasury Department		38 90
		381,840 68
Court-house and post-office, Pittsburgh, Pa.:		
To G. A. Bartlett		9,142 64
J. F. Drava		75,000 00
Treasury Department		16 68
		84,159 32
Court-house and post-office at Pensacola, Fla.:		
To G. A. Bartlett		923 60
L. Hernandez		1,000 00
J. M. Tarble		7,000 00
		8,923 60
Post-office and court-house, &c., Peoria, Ill.:		
To G. A. Bartlett		3,989 79
H. Knowles		23,000 00
Treasury Department		10 16
		26,999 95
Post-office, &c., Poughkeepsie, N. Y.:		
To G. A. Bartlett		295 20
J. B. Jewett, deceased		37,000 00
		37,295 20
Court-house and post-office at Parkersburg, W. Va.:		
To G. A. Bartlett		84 35
Court-house and post-office, &c., Paducah, Ky.:		
To J. H. Ashcroft		3,700 00
G. A. Bartlett		362 04
Treasury Department		28
		4,062 32
Deduct repayments:		
By J. H. Ashcroft	$229 38	
Treasury Department	172 13	
		401 51
		3,660 81

1883–'84. CIVIL—DIPLOMATIC.

Post-office, court-house, &c., Quincy, Ill.:
To G. A. Bartlett $5,186 01
J. A. Connolly 100 00
R. Powell 10,000 00
Treasury Department 25 93
15,311 94

Post-office and court-house, Raleigh, N. C.:
To G. A. Bartlett 33 75

Court-house and post-office, Rochester, N. Y.:
To G. A. Bartlett 562 29
Mary E. and Julia Briggs and Sarah S. Wollard 8,500 00
H. S. Pierce 8,000 00
Treasury Department 40 18
17,102 47

Post-office and court-house, &c., Syracuse, N. Y.:
To G. A. Bartlett 2,103 90
J. M. Gilbert 11,000 00
Treasury Department 32 34
13,136 24

Sub-Treasury building, San Francisco, Cal.:
To G. A. Bartlett 17 75

Post-office, &c., Scranton, Pa.:
To G. A. Bartlett 422 05

Post-office, &c., St. Joseph, Mo.:
To G. A. Bartlett 915 50

Post-office, court-house, &c., Shreveport, La.:
To J. Caldwell $6,250 00
J. H. Stoner 3,750 00
10,000 00

Court-house and post-office at Topeka, Kans.:
To T. J. Anderson 52,000 00
G. A. Bartlett 305 90
Missouri Pacific Rwy. Co. 80
The Star Union Line 1 04
Treasury Department 16 11
52,323 85

Court-house and post-office at Trenton, N. J.:
To G. A. Bartlett 31 60

Post-office at Terre Haute, Ind.:
To G. A. Bartlett 643 15
W. W. Carter 6,000 00
W. R. McLean 20,000 00
26,643 15

Court-house and post-office at Utica, N. Y.:
To G. A. Bartlett 3 00

Court-house, post-office, &c., Williamsport, Pa.:
To G. A. Bartlett 81 24

Treasury building, Washington, D. C.:
To J. C. Hobbs 5,000 00

Building for Bureau of Engraving and Printing:
To T. J. Hobbs 941 88
Deduct repayment:
By T. J. Hobbs 941 88

DIPLOMATIC.

Salaries of ministers, 1884:
To J. Baker, minister, Venezuela $5,625 00
M. J. Cramer, minister, Switzerland 224 50
R. M. Daggett, minister, Hawaii 5,423 39
L. H. Foote, minister, Corea. 1,250 00
R. Gibbs, minister, Bolivia .. 421 20
W. H. Hunt, minister, Russia 985 32
H. C. Hall, minister, Central America 7,500 00
J. A. Halderman, minister, Siam 2,452 10
G. H. Heap, chargé d'affaires, Constantinople 694 96
J. M. Langston, minister, Hayti 4,922 38
C. A. Logan, minister, Chili .. 11,307 24
Morton, Rose & Co., bankers, London 115,215 87
G. Maney, minister, Bolivia .. 1,154 90
P. H. Morgan, minister, Mexico 11,011 00
S. L. Phelps, minister, Peru .. 2,342 40
D. L. Reed, chargé d'affaires, Madrid 890 00
L. Richmond, chargé d'affaires, Rome 1,027 17
J. H. Smyth, minister, Liberia 4,768 53
W. L. Scruggs, minister, Bogota 5,625 00
Carried forward 182,840 96

Salaries of ministers, 1884—Cont'd.
Brought forward $182,840 96
To W. W. Thomas, jr., minister, Sweden and Norway 101 90
W. Williams, chargé d'affaires, Uruguay and Paraguay 4,065 55
187,008 41
Deduct repayments:
By L. H. Foote $1,250 00
J. M. Langston 380 05 1,630 05
185,378 36

Salaries of ministers, 1883:
To W. W. Astor, minister, Italy 1,125 00
J. Baker, minister, Venezuela 1,875 00
S. G. W. Benjamin, minister, Persia 1,120 00
J. M. Comly, minister, Hawaii- 629 66
M. J. Cramer, minister, Switzerland 280 00
R. M. Daggett, minister, Hawaii 1,875 00
N. Fish, minister, Belgium ... 40 00
R. Gibbs, minister, Bolivia .. 176 63
H. C. Hall, minister, Central America 1,000 00
W. H. Hunt, minister, Russia 245 00
J. M. Langston, minister, Hayti 1,640 39
Carried forward 10,006 68

Salaries of ministers, 1883—Cont'd.		
Brought forward		$10,006 68
To C. A. Logan, minister, Chili		1,700 00
G. Maney, minister, Bolivia		1,055 55
R. C. Morgan, disbursing clerk, State Department		1,000 00
P. H. Morgan, minister, Mexico		989 00
Morton, Rose & Co., bankers, London		32,322 05
S. L. Phelps, minister, Peru		357 14
D. T. Reed, chargé d'affaires, Madrid		132 75
J. H. Smyth, minister, Liberia		319 51
W. L. Scroggs, minister, Bogota		1,465 00
J. L. Stevens, minister, Sweden and Norway		213 47
A. A. Sargent, minister, Germany		1,145 00
W. W. Thomas, jr., minister, Sweden and Norway		515 11
W. Williams, chargé d'affaires, Uruguay and Paraguay		836 70
J. R. Weaver, consul-general, Austria		939 56
J. C. White, chargé d'affaires, Rio de Janeiro		2,729 65
J. R. Young, minister, China		170 00
		55,897 17
Deduct repayments:		
By appropriation account	$246 20	
J. M. Comly	6 86	
J. M. Langston	375 80	
G. Maney	20 22	
Morton, Rose & Co.	3,478 36	
		4,127 44
		51,769 73
Salaries secretaries of legation, 1884:		
To H. C. Hall, minister, Central American States		500 00
Morton, Rose & Co., bankers, London		20,377 74
H. H. Morgan, secretary legation, Mexico		1,651 70
E. S. Nadal, secretary legation, London		83 95
W. L. Strong, secretary legation, Vienna		136 96
C. B. Trail, secretary legation, Brazil		117 39
J. C. White, chargé d'affaires, Rio de Janeiro		225 00
		23,092 74
Salaries secretaries of legation, 1883:		
To H. C. Hall, minister, Central American States		250 00
H. H. Morgan, secretary legation, Mexico		148 30
Morton, Rose & Co., bankers, London		3,554 91
J. C. White, chargé d'affaires, Rio de Janeiro		488 74
		4,441 95
Deduct repayments:		
By appropriation account	$209 65	
Morton, Rose & Co.	377 74	
		587 39
		3,854 56
Extending diplomatic relations with Governments of Eastern Asia:		
To L. H. Foote, minister, Corea		3,750 00

Contingent expenses, foreign missions, 1884:		
To W. W. Astor, minister, Italy		$77 37
S. G. W. Benjamin, minister, Persia		1,215 57
J. Baker, minister, Venezuela		79 72
C. P. Barnard, consul, Leghorn		27 02
J. A. Bingham, minister, Japan		5 00
M. J. Cramer, minister, Switzerland		125 00
N. D. Comanos, vice-consul-general, Cairo		130 62
W. L. Dayton, consul, Netherlands		43 75
R. M. Daggett, minister, Hawaii		244 02
H. S. Everett, chargé d'affaires, Berlin		510 00
C. Ewers, consul, Windsor		100 00
L. H. Foote, consul, Corea		1,091 65
L. Foote, consul, Turkey		149 57
J. W. Foster, minister, Spain		2,223 65
N. Fish, minister, Belgium		15 00
J. B. Glover, consul, Havre		55 91
H. C. Hall, minister, Central American States		1,580 79
W. H. Hunt, minister, Russia		138 63
C. Holcombe, secretary legation, Peking		1,148 39
W. Hoffman, minister, Denmark		38 33
W. J. Hoppin, chargé d'affaires, Great Britain		143 07
T. J. Keickhofer, disbursing clerk		16,000 00
C. A. Logan, minister, Chili		781 46
J. R. Lowell, minister, England		1,054 72
J. M. Langston, minister, Hayti		324 62
R. C. Morgan, disbursing clerk		25,000 00
Morton, Rose & Co., bankers, London		20,029 20
L. P. Morton, minister, France		265 26
P. H. Morgan, minister, Mexico		2,087 87
T. A. Osborn, minister, Brazil		77 99
S. L. Phelps, minister, Peru		3,742 99
S. B. Packard, consul, Liverpool		486 66
W. L. Scruggs, minister, Colombia		400 00
E. Schuyler, minister, Roumania		253 24
A. A. Sargent, minister, Germany		943 54
F. H. Schuch, consul, Barcelona		100 00
W. W. Thomas, minister, Sweden and Norway		316 21
A. Taft, minister, Austria		155 00
W. Williams, chargé d'affaires, Uruguay and Paraguay		256 38
L. Wallace, minister, Turkey		808 27
J. R. Young, minister, China		2,956 60
		85,273 07
Deduct repayments:		
By Department of State	$729 18	
W. H. Hunt	110 32	
R. C. Morgan	8,766 33	
J. W. Siler	345 00	
J. R. Young	27 84	
		9,978 67
		75,294 40

1883–'84. DIPLOMATIC.

Contingent expenses, foreign missions, 1883:

To W. W. Astor, minister, Italy	$13 93	
S. G. W. Benjamin, minister, Persia	770 78	
M. J. Cramer, minister, Switzerland	492 75	
R. M. Dagget, minister, Hawaii	91 36	
J. W. Foster, minister, Spain	109 98	
L. H. Foote, minister, Corea	711 97	
J. M. Francis, minister, Portugal	602 30	
G. Goward, secretary legation, Japan	102 55	
W. H. Hunt, minister, Russia	383 43	
H. C. Hall, minister, Central American States	284 68	
J. A. Halderman, minister, Siam	250 00	
C. A. Logan, minister, Chili	664 10	
J. M. Langston, minister, Hayti	260 41	
J. R. Lowell, minister, England	480 88	
P. H. Morgan, minister, Mexico	782 75	
L. P. Morton, minister, France	663 98	
R. C. Morgan, disbursing clerk	1,107 05	
G. Maney, minister, Bolivia	312 02	
Morton, Rose & Co., bankers, London	6,954 46	
J. Mathe, consul, Sonsonate	145 37	
G. P. Marsh, late minister, Italy	94	
T. A. Osborn, minister, Brazil	80 77	
S. B. Packard, consul, Liverpool	486 66	
G. P. Pomeroy, consul-general, Cairo	628 21	
D. T. Reed, chargé de affaires, Madrid	58 35	
A. A. Sargent, minister, Germany	83 92	
W. L. Scruggs, minister, Colombia	100 00	
E. Schuyler, minister, Roumania	171 81	
J. L. Stevens, minister, Sweden and Norway	17 63	
R. W. Turpin, vice-consul, Panama	100 00	
A. Taft, minister, Austria	155 00	
W. Williams, chargé d'affaires, Uruguay and Paraguay	29 94	
L. Wallace, minister, Turkey	75 00	
J. R. Young, minister, China	27 84	
		17,200 82
Deduct repayments:		
By appropriation account	$1,262 49	
E. L. Baker	257 81	
C. A. Logan	100 00	
R. C. Morgan	561 06	
Morton, Rose & Co	29 20	
Secretary of State	147 85	
		2,358 41
		14 842 41

Contingent expenses, foreign missions, 1882:

To T. F. Dwight		1,275 00
Deduct repayment:		
By A. A. Garguela		12 37
		1,262 63

Contingent expenses, foreign missions, 1881 and prior years:

By T. F. Dwight	$649 99	
R. C. Morgan	70 96	
		720 95

Salaries, consular service, 1884:

To E. M. Allen, consul, Bermuda	$1,125 00
L. T. Adams, consul, Geneva	969 75
H. L. Atherton, consul, Pernambuco	1,515 32
H. C. C. Astwood, consul, San Domingo	1,122 84
C. C. Andrews, consul, Rio Janeiro	4,125 65
D. Atwater, consul, Tahiti	788 00
T. Adamson, consul, Panama	2,496 66
W. C. Burchard, consul, Ruatan and Truxillo	895 82
B. H. Barrows, consul, Dublin	1,380 08
C. Bartlett, consul, Guadeloupe	1,125 00
H. N. Beach, consul, Guayaquil	1,587 84
S. P. Brown, cousular clerk, Belfast	75 00
E. L. Baker, consul, Buenos Ayres	2,282 16
W. S. Bird, consul, Laguayra	1,088 32
J. M. Bailey, consul, Hamburg	1,250 00
C. P. Barnard, consul, Leghorn	750 00
M. S. Brewer, consul, Berlin	2,850 00
S. H. M. Byers, consul, Zurich	1,500 00
H. M. Brent, consul, Callao	2,444 62
L. A. Bergholz, consul, Chinkiang	863 90
C. C. Bancroft, vice-consul-general, Calcutta	3,236 16
S. P. Bayley, consul, Palermo	456 53
H. D. Bennett, consul, Nantes	250 00
S. E. Belford, consul, Levuka	82 42
A. Badeau, consul-general, London	3,000 00
R. S. Chilton, consul, Goderich	1,123 67
J. G. Crawford, consul, Coaticook	1,701 33
E. Conroy, consul, San Juan	1,500 00
A. J. Cassard, consul, Tampico	1,126 50
D. J. Crain, consul, Milan	1,125 50
T. Canisius, consul, Apia	1,862 73
F. M. Cheney, consul, Zanzibar	752 75
P. Carroll, consul, Palermo	396 70
R. T. Clayton, consul, Para	123 63
G. L. Catlin, consul, Stuttgart	1,125 00
F. Charlesworth, consul, Funchal	123 63
F. D. Cheshire, vice-consul-general, Shanghai	1,675 44
D. M. Dunn, consul, Valparaiso	2,241 84
D. Duer, jr., consular clerk, Lisbon	917 60
J. T. Dubois, consul, Leipsic	1,360 76
A. J. DeZeyk, consul, Turin	923 50
O. N. Denny, consul-general, Shanghai	3,236 45
S. W. Dabney, consul, Fayal	1,125 00
H. Davy, consul, Newcastle	229 03
A. V. Dockery, consul, Leeds	1,000 00
B. O. Duncan, consul, Naples	37 50
D. Eckstein, consul, Amsterdam	1,125 00
C. Ewers, consul, Windsor	1,125 00
J. Fletcher, consul, Genoa	1,590 74
A. P. Francias, vice-consul, Genoa	78 10
Carried forward	64,888 47

1883–'84. DIPLOMATIC.

Salaries, consular service, 1884—Continued.	
Brought forward	$64,888 47
To P. Figyelmesy, consul, Demerara	1,506 97
B. F. Farnham, consul, Bombay	782 88
W. G. Frye, consul, Halifax	2,250 00
J. B. Glover, consul, Havre	2,904 20
G. W. Griffin, consul, Auckland	1,110 77
S. Goutier, consul, Cape Haytien	870 00
W. E. Goldsborough, consul, Amoy	2,578 78
W. F. Grinnell, consul, Bradford	2,250 00
W. H. Garfield, consul, St. Pierre	724 38
T. D. Golding, consul, Laguayra	36 68
G. Gifford, consul, Basle	32 97
F. G. Houghwout, consul, Naples	1,164 47
W. C. Howells, consul, Toronto	25 78
F. W. Hyndman, consul, Charlottetown	238 35
F. P. Hastings, consular clerk, Honolulu	900 00
G. H. Holt, consul, Gaspé Basin	757 17
J. W. Hazelton, consul, Hamilton	1,500 00
G. H. Heap, consul-general, Constantinople	2,179 12
B. Harte, consul, Glasgow	2,250 00
R. Y. Holley, consul, Barbadoes	686 49
G. E. Hoskinson, consul, Kingston	1,024 99
J. Hutchison, consul, Funchal	32 50
J. W. Harper, consul, Munich	1,127 78
S. P. Hubbell, consul, St. John's	1,125 00
H. O. Heffter, vice-consul, Leipsic	423 91
W. E. Howard, consul, Toronto	1,000 00
D. K. Hobart, consul, Windsor	757 74
O. Hatfield, consul, Batavia	500 00
G. H. Horstman, consul, Nuremberg	1,500 00
E. Johnson, consul, Pictou	1,084 55
A. C. Jones, consul, Nagasaki	2,146 51
C. E. Jackson, consul, Antigua	905 63
A. Jourdan, consul, Algiers	749 68
E. R. Jones, consul, Cardiff	1,842 92
W. King, consul, Birmingham	1,875 00
C. Klinck, consul, Manila	423 67
C. Kahlo, consul, Sydney	1,500 69
H. Keifer, consul, Stettin	518 12
H. Kreisman, consul-general, Berlin	271 75
F. Leland, consul, Hamilton	16 30
J. C. Laudreau, consul, Santiago de Cuba	1,876 50
J. Low, consul, Clifton	1,129 50
P. Lange, consul, St. Stephen	1,123 50
L. A. Lothrop, consul, Bristol	1,074 08
G. F. Lincoln, consul, Stettin	1,019 04
W. B. Lovie, vice-consul, Cardiff	333 86
J. A. Lewis, consul, Sierra Leone	600 48
H. S. Lasar, consul, Port Stanley	1,168 14
J. A. Leonard, consul, Leith	2,265 70
R. Locke, consul, Newcastle	504 59
E. Lane, consul, Tunstall	1,875 00
Morton, Rose & Co., bankers, London	3,500 00
H. M. Moore, vice-consul, Callao	114 24
Carried forward	125,048 85

Salaries, consular service, 1884—Continued.	
Brought forward	$125,048 85
To J. H. Moore, consul, Callao	104 61
W. Morey, consul, Ceylon	1,133 62
H. Matson, consul, Calcutta	1,065 66
B. Mackey, consul, Rio Grande do Sul	481 55
T. J. McLane, jr., consul, Nassau	1,500 00
A. Muller, jr., consul, Valparaiso	91 34
J. A. McKnight, consul, St. Helena	1,057 69
S. Merrill, consul, Jerusalem	1,201 17
E. B. Mussey, consul, Mahé	393 75
D. A. McKinley, consul, Honolulu	3,000 00
J. T. Mason, consul, Dresden	1,875 00
J. S. Martin, vice-consul, Marseilles	1,758 24
W. E. Meyer, consul, Para	251 37
F. H. Mason, consul, Basle	1,215 43
E. A. Merritt, consul-general, London	1,173 92
H. C. Marston, consul, Malaga	1,011 26
L. H. Mitchell, vice-consul, London	326 08
F. A. Matthews, consul, Tangier	545 78
G. F. Mosher, consul, Sonneberg	1,500 00
O. Malmros, consul, Leith	357 13
J. S. Mosby, consul, Hong-Kong	2,000 00
P. Naylor, vice-consul, Genoa	16 35
McW. B. Noyes, consul, Venice	764 06
E. L. Oppenheim, consul, Cadiz	1,128 96
G. H. Owen, consul, Messina	1,125 00
J. J. Piatt, consul, Cork	1,530 57
S. D. Pace, consul, Sarnia	1,125 00
W. P. Pierce, consul, Cienfuegos	1,856 40
LaRue Peck, consul, Fort Erie	1,125 00
B. J. Pridgeon, consul, Piedras Negras	750 00
F. Paul, consul, Odessa	1,631 90
H. Pease, consul, Santiago, C. V. I	785 16
B. F. Peixotto, consul, Lyons	1,875 00
J. S. Potter, consul, Crefeld	1,500 00
E. H. Plumacher, consul, Maracaibo	1,500 00
W. A. Preller, consul, Rio Grande do Sul	531 21
A. C. Prindle, consul, Para	802 57
T. T. Prentiss, consul, Port Louis	1,316 19
C. A. Phelps, consul, Prague	1,500 00
L. W. Pilcher, consul, Tientsin	1,738 02
S. B. Packard, consul, Liverpool	3,000 00
J. S. Parish, consul, Chemnitz	1,000 00
L. Richmond, secretary legation, Rome	2,128 53
J. T. Robinson, consul, Beirut	1,568 75
R. B. Robbins, consul, Ottawa	2,333 67
A. L. Russell, consul, Montevideo	1,002 71
H. B. Ryder, consul, Copenhagen	1,146 29
G. W. Roosevelt, consul, Bordeaux	1,875 00
D. L. Reed, consul, Madrid	301 32
W. E. Rowland, consul, Nice	46 22
F. M. Rice, consul, Colon	1,362 42
E. Stevens, consul, Ningpo	2,490 17
L. D. Syle, consul, Funchal	614 80
V. V. Smith, consul, St. Thomas	1,501 17
Carried forward	190,064 89

883-'84. DIPLOMATIC.

Salaries, consular service, 1884—Continued.		
Brought forward		$190 064 89
To E. J. Smithers, consul, Chinkiang		1,888 16
H. L. Slaght, consul, Prescott.		1,130 43
W. P. Sutton, consul, Matamoros		1,500 00
S. H. Smith, consul, Nuevo Laredo		795 95
E. Stanton, consul-general, St. Petersburg		1,954 74
N. K. Sawyer, consul, Turks Island		705 99
D. H. Strother, consul, Mexico		1,500 00
J. A. Sutter, consul, Acapulco		1,177 00
H. J. Sprague, consul, Gibraltar		1,125 00
J. W. Siler, consul, Cape Town		1,078 95
O. M. Spencer, consul, Melbourne		3,140 89
F. H. Scheuch, consul, Barcelona		990 16
J. F. Shepard, consul, Hankow		2,430 48
S. Spackman, consul, Cologne.		1,500 00
J. Smith, consul, Nottingham.		1,875 00
C. Seymour, consul, Canton...		2,250 48
J. H. Steuart, consul, Antwerp		1,875 00
A. G. Studer, consul, Singapore		1,886 58
W. Schoenle, consul, Barmen.		1,500 00
R. J. Stevens, consul, Palermo		164 84
L. P. Stearns, consul, Montreal		3,000 00
W. W. Sikes, consul, Cardiff..		386 09
E. M. Smith, consul, Mannheim		1,027 18
W. E. Stevens, consul, Smyrna		1,694 38
A. D. Shaw, consul, Manchester		2,250 00
J. Stahel, consul, Osaka and Hiogo		2,251 13
J. A. Springer, consul, Havana		407 60
A. Stein, vice-consul, Brussels		224 19
S. A. Touhey, consular clerk at large		775 00
M. H. Twitchell, consul, Kingston		1,125 00
J. W. Taylor, consul, Winnipeg		1,128 59
William Thompson, consul, Southampton		1,125 00
J. Turner, consul, Amherstburg		1,125 00
R. D. Tucker, consul, Manila.		376 21
B. Tzschuck, consul, Vera Cruz		2,250 00
O. V. Tousley, consul, Leipsic		576 09
G. C. Tanner, consul, Verviers		1,125 00
J. G. Voight, consul, Manila..		1,129 93
A. Van Camp, consul, Levuka		746 65
J. F. Van Ingen, consul, Talcahuano		628 17
F. Vogeler, consul-general, Frankfort		2,250 00
D. Vickers, consul, Matanzas.		1,866 85
T. B. Van Buren, consul-general, Kanagawa		5,586 38
F. Visich, consul, Trieste		500 00
J. N. Wasson, consul, Quebec		1,133 32
C. M. Wood, consular clerk, Rome		1,268 65
W. A. Worden, consul, Charlottetown		918 78
T. Wilson, consul, Nantes....		886 48
A. B. Wood, consul, Belfast..		1,925 00
J. B. Weaver, consul, Berlin.		1,125 00
J. Worthington, consul, Malta		1,180 98
A. Willard, consul, Guaymas		780 28
Carried forward		**263,307 47**

Salaries, consular service, 1884—Continued.		
Brought forward		$263,307 47
To R. M. Whitney, consul, Tamatave		751 65
J. C. A. Wingate, consul, Foochow		2,610 00
W. L. Welsh, consul, Florence		1,125 00
E. E. White, consul, Cabello.		250 00
V. B. Wells, consul, Dundee.		1,875 00
J. R. Weaver, consul, Vienna		2,250 00
G. Walker, consul, Paris		4,500 00
E. P. White, consul, Mahé		393 75
D. B. Warner, consul, St. John		1,457 19
J. F. Winter, consul, Rotterdam		1,500 00
C. B. Webster, consul, Sheffield		1,875 00
J. Wilson, consul, Brussels ..		1,650 81
J. M. Wilson, consul, Bremen		1,875 00
E. A. Youngs, consul, Manila		264 95
F. C. Zimmerman, consul, Charlottetown		461 13
J. C. Zuck, consul, Tientsin .		890 08
		287,037 03
Deduct repayments:		
By C. C. Andvews	$751 18	
D. Atwater	38 00	
H. N. Beach	87 71	
C. C. Bancroft	26 96	
L. A. Bergholtz	56 00	
J. G. Crawford	82 75	
F. D. Cheshire	750 00	
O. N. Denny	989 24	
J. Fletcher	259 95	
J. B. Glover	682 59	
J. G. Hoskinson	92 66	
E. R. Jones	77 99	
C. Kahlo	2 18	
J. A. Leonard	333 55	
W. B. Lovie	368 81	
F. A. Matthews	32 00	
H. Mattson	182 50	
W. A. Preller	3 52	
H. Pease	20 60	
G. P. Pomeroy	30 50	
D. T. Reed	2 50	
E. J. Sunthers	105 66	
W. W. Sikes	118 35	
D. Vickers	363 28	
F. Visich	500 00	
		5,958 48
		$281,078 55
Salaries consular service, 1883:		
To C. M. Allen, consul, Bermuda		375 00
H. L. Atherton, consul, Pernambuco		517 43
L. T. Adams, consul, Geneva		270 88
C. C. Andrews, consul-general Rio de Janeiro		1,934 67
T. Adamson, consul, Panama		585 16
D. Atwater, consul, Tahiti...		250 00
H. C. C. Astwood, consul, San Domingo		436 27
B. H. Barrows, consul, Dublin		500 00
A. Badeau, consul-general, Havana		3,600 00
H. N. Beach, consul, Puerto Cabello		750 00
E. L. Baker, consul, Buenos Ayres		1,559 75
W. S. Bird, consul, La Guayra		375 00
J. M. Bailey, consul, Hamburg		625 00
C. P. Barnard, consul, Leghorn		375 00
S. P. Bayley, consul, Palermo		375 00
C. Bartlett, consul, Guadeloupe		375 00
Carried forward		**13,004 16**

1883–'84. DIPLOMATIC.

Salaries, consular service, 1883—Continued.	
Brought forward	$13,004 16
To M. S. Brewer, consul, Berlin	1,250 00
S. H. M. Byers, consul, Zurich	499 51
W. C. Burchard, consul, Ruatan and Truxillo	104 18
R. S. Chilton, consul, Goderich	442 80
J. G. Crawford, consul, Coaticook	565 00
A. T. Carter, vice-consul, Gaspé Basin	134 62
D. J. Crain, consul, Milan	374 99
A. J. Cassard, consul, Tampico	375 50
G. L. Catlin, consul, Stuttgart	375 00
T. Canisius, consul, Apia	1,049 21
E. Conroy, consul, San Juan	500 00
G. C. Campbell, commercial agent, Gaboon	250 00
F. M. Cheney, consul, Zanzibar	27 47
D. M. Dunn, consul, Charlottetown	375 00
L. DeR. Du Verge, consul, St. Paul de Loando	394 03
A. J. De Zeyk, consular clerk, Lisbon	308 64
A. V. Dockrey, consul, Leeds	1,000 00
J. Dittmer, vice-consul, Stettin	256 91
D. Duer, consular clerk, Lisbon	49 45
B. O. Duncan, consul, Naples	417 69
J. T. DuBois, consul, Aix la Chapelle	380 41
O. N. Denny, consul-general, Shanghai	2,161 35
S. W. Dabney, consul, Fayal	375 00
C. Ewers, consul, Windsor	375 00
D. Eckstein, consul, Amsterdam	375 00
J. J. Flinn, consul, Chemnitz	774 24
W. G. Frye, consul-general, Halifax	752 92
P. Figyelmesy, consul, Demerara	756 26
B. F. Farnham, consul, Bombay	289 15
A. P. Francia, consul, Geneva	197 80
J. W. Farrand, consul, San Domingo	313 73
J. B. Glover, consul, Havre	1,769 14
S. Goutier, consul, Cape Haytien	250 00
W. H. Garfield, consul, Martinique	331 37
W. F. Grinnell, consul, Bradford	750 00
W. E. Goldsborough, consul, Amoy	873 00
G. W. Griffin, consul, Auckland	737 58
J. F. Hazleton, consul, Hamilton	440 94
G. H. Holt, consul, Gaspé Basin	115 38
O. Hatfield, consul, Batavia	435 57
W. C. Howells, consul, Toronto	500 00
J. A. Halderman, consul, Bangkok	760 30
D. K. Hobart, consul, Windsor	250 00
G. E. Hoskinson, consul, Kingston	502 51
G. H. Heap, consul-general, Constantinople	948 60
J. W. Harper, consul, Munich	375 76
B. Harte, consul, Glasgow	750 00
S. P. Hubbell, consul, St. John's	375 00
R. Y. Holley, consul, Barbadoes	375 00
Carried forward	39,045 17

Salaries, consular service, 1883—Continued.	
Brought forward	$39,045 17
To G. H. Horstman, consul, Nuremberg	500 00
P. Jones, consul, San Domingo	4 18
E. Johnson, consul, Pictou	375 00
C. E. Jackson, consul, Antigua	375 00
E. R. Jones, consul, Newcastle	375 84
A. C. Jones, consul, Nagasaki	750 00
C. Kahlo, consul, Sydney	2,001 82
W. King, consul, Birmingham	625 00
L. A. Lothrop, consul, Bristol	376 49
P. Lange, consul, St. Stephen	376 48
J. Low, consul, Clifton	376 50
J. C. Landreau, consul, Santiago de Cuba	625 00
J. A. Leonard, consul, Leith	964 83
J. A. Lewis, consul, Sierra Leone	250 00
H. S. Lasar, consul, Port Stanley	310 53
F. Leland, consul, Hamilton	500 00
E. E. Lane, consul, Tunstall	625 00
J. S. Mosby, consul, Hong-Kong	1,000 00
J. E. Montgomery, consul, Trieste	55 55
A. Moller, jr., consul, Valparaiso	1,105 24
E. A. Merritt, consul-general, London	3,000 00
S. Merrill, consul, Jerusalem	400 83
T. J. McLain, jr., consul, Nassau	500 00
J. T. Mason, consul, Dresden	625 00
J. A. McKnight, consul, St. Helena	520 09
D. A. McKinley, consul, Honolulu	1,100 00
H. C. Marston, consul, Malaga	139 00
J. H. Moore, consul, Callao	1,591 02
G. F. Mosher, consul, Sonneberg	531 61
W. Morly, consul, Ceylon	375 00
E. P. Mussey, consul, Mahé	393 75
Morton, Rose & Co., bankers, London	939 57
F. H. Mason, consul, Basle	522 50
F. A. Matthews, consul, Tangier	5 02
H. C. Miller, consul, Guayaquil	455 79
H. Matson, consul, Calcutta	1,250 00
McW. B. Noyes, consul, Venice	251 38
E. L. Oppenheim, consul, Cadiz	375 00
G. H. Owen, consul, Messina	375 00
S. D. Pace, consul, Port Sarnia	375 00
LaRue Peck, consul, Fort Erie	375 00
J. J. Piatt, consul, Cork	254 31
W. A. Preller, consul, Rio Grande do Sul	533 51
S. B. Packard, consul, Liverpool	3,000 00
F. Paul, consul, Odessa	551 82
B. F. Peixotto, consul, Lyons	625 00
H. Pease, consul, Santiago, C. V. I	257 44
J. S. Potter, consul, Crefeld	500 00
E. H. Plumacher, consul, Maracaibo	500 00
C. A. Phelps, consul, Prague	500 00
W. P. Pierce, consul, Cienfuegos	625 00
T. T. Prentiss, consul, Port Louis	497 50
A. C. Prindle, consul, Para	375 00
G. P. Pomeroy, consul, Cairo	285 00
W. W. Robinson, consul, Tamatave	820 95
Carried forward	74,043 72

1883–'84. DIPLOMATIC.

Salaries, consular service, 1883—Continued.		
Brought forward		$74,043 72
To F. W. Rice, consul, Colon		1,689 02
R. B. Robbins, commercial agent, Ottawa		750 00
W. F. Roland, consul, Nice		281 07
L. Richmond, consul-general, Rome		940 00
J. T. Robeson, consul, Beirut		579 17
H. B. Ryder, consul, Copenhagen		391 45
A. L. Russell, cousul, Montevideo		510 53
G. W. Roosevelt, consul, Bordeaux		625 00
E. D. Ropes, consul, Zanzibar		76 92
E. Stevens, consul, Ningpo		625 00
W. E. Stevens, consul, Smyrna		175 00
W. Schuchardt, consul, Piedras Negras		250 00
W. P. Sutton, consul, Matamoros		500 00
E. Stanton, consul-general, St. Petersburg		500 00
S. P. Stearns, consul, Montreal		1,000 00
H. L. Slaght, consul, Prescott		375 00
W. E. Stevens, consul, Smyrna		500 00
L. D. Syle, consul, Funchal		396 26
W. W. Sykes, consul, Cardiff		832 19
H. J. Sprague, consul, Gibraltar		375 00
J. W. Siler, consul, Cape Town		587 15
J. A. Sutter, jr., consul, Acapulco		823 00
F. H. Scheuch, consul, Barcelona		376 00
E. J. Smithers, consul, Chinkiang		914 65
S. Spackman, consul, Cologne		500 00
J. H. Steuart, consul, Antwerp		625 00
J. Smith, consul, Nottingham		625 00
E. M. Smith, consul, Mannheim		375 00
I. F. Shepard, consul, Hankow		888 92
D. H. Strother, consul, Mexico		500 00
V. V. Smith, consul, St. Thomas		163 12
J. Stahel, consul, Osaka and Hiogo		750 00
S. H. Smith, consul, Nuevo Laredo		250 00
O. M. Spencer, consul, Melbourne		1,129 49
C. Seymour, consul, Canton		884 52
A. G. Studer, consul, Singapore		625 00
A. D. Shaw, consul, Manchester		750 00
W. Schoenle, consul, Barmen		500 00
N. K. Sawyer, consul, Turks Island		294 51
W. H. Twitchell, consul, Kingston		375 00
J. W. Taylor, consul, Winnipeg		382 55
O. V. Tousley, consul, Leipsic		499 92
B. Tzschuck, consul, Vera Cruz		1,500 00
W. H. Trumbull, consul, Zanzibar		206 75
W. Thompson, consul, Southampton		375 00
G. C. Turner, consul, Verviers and Liege		375 00
H. A. Taylor, consul, Marseilles		625 00
J. Turner, consul, Amhertsburg		375 00
R. D. Tucker, consul, Manila		612 50
J. F. Van Ingen, consul, Talcahuano		357 42
D. Vickers, consul, Matanzas		1,500 00
Carried forward		104,160 83

Salaries, consular service, 1883—Continued.		
Brought forward		$104,160 83
To F. Vogeler, consul, Frankfort		750 00
F. Visich, consul, Trieste		331 45
A. Van Camp, consul, Levuka		257 77
T. B. Van Buren, consul-general, Kanagawa		1,759 14
J. N. Wasson, consul, Quebec		377 10
T. Wilson, consul, Nantes		250 00
A. B. Wood, consul, Belfast		1,000 00
C. M. Wood, consular clerk, Rome		315 00
J. B. Weaver, consul, Bahia		375 00
J. R. Weaver, consul, Vienna		326 92
W. L. Welsh, consul, Florence		375 00
A. Willard, consul, Guaymas		210 70
C. B. Webster, consul, Sheffield		625 00
W. B. Wells, consul, Dundee		625 00
J. Wilson, consul, Brussels		625 00
J. F. Winter, consul, Rotterdam		500 00
D. B. Warner, consul, St. John		500 00
J. M. Wilson, consul, Bremen		625 00
J. C. A. Wingate, consul, Foochow		875 00
R. M. Whitney, consul, Tientsin		413 76
G. Walker, consul-general, Paris		2,400 00
J. C. Zuck, consul, Tientsin		890 87
		118,568 54
Deduct repayments:		
By C. C. Andrews	$30 01	
Appropriation account	$2,575 03	
J. G. Crawford	62 00	
L. DeR. Du Verge	583 70	
O. N. Denny	500 00	
A. P. Francia	150 00	
J. B. Glover	269 14	
D. K. Hobert	12 19	
C. Kahlo	65 82	
J. A. Leonard	334 80	
H. C. Marston	245 93	
W. A. Preller	33 51	
G. P. Pomeroy	140 00	
W. W. Sikes	175 00	
J. F. Van Ingen	6 60	
F. Visich	276 51	
A. Willard	25 87	
		5,486 11
		113,082 43
Salaries consular service, 1882:		
To O. Malmros, consul, Pictou		61 14
Morton, Rose & Co., bankers, London		535 31
		596 45
Deduct payments:		
By A. B. Cobb	$127 71	
J. C. Kretchmar	58 35	
		186 06
		410 39
Salaries consular service, 1881 and prior years:		
By R. Beardsly	$18 30	
J. C. Eckbert	162 92	
D. B. Sickels	6 36	
A. T. L. Torbert	218 45	
	406 03	
Allowance for consular clerks, 1884:		
To T. Adamson, consul, Panama		450 00
C. C. Andrews, consul-general, Rio de Janeiro		500 00
Carried forward		950 00

1883-'84. DIPLOMATIC.

Allowance for consular clerks, 1884—Continued.	
Brought forward	$950 00
To M. S. Brewer, consul, Berlin	1,125 00
J. M. Bailey, consul, Hamburg	750 00
F. Belli, consul, Palermo	100 00
S. P. Bayley, consul, Palermo	91 30
S. H. M. Byers, consul, Zurich	150 00
C. C. Bancroft, vice-consul, Calcutta	500 00
G. L. Catlin, consul, Stuttgart	450 00
S. W. Cooper, consul, Gothenberg	94 50
M. J. Cramer, consul, Berne	187 50
T. D. Cheshire, consul, Shanghai	1,000 00
A. V. Dockery, consul, Leeds	300 00
O. N. Denny, consul-general, Shanghai	500 00
J. T. Du Bois, consul, Leipsic	250 00
P. Figyelmesey, consul, Demerara	505 10
W. G. Frye, consul, Halifax	604 05
C. C. Ford, consul, Sagua la Grande	300 00
J. Fletcher, consul, Genoa	450 00
J. B. Glover, consul, Havre	750 00
W. F. Grinnell, consul, Bradford	600 00
F. G. Houghwout, consul, Naples	465 00
G. H. Heap, consul-general, Constantinople	99 00
G. F. Horstman, consul, Nuremberg	250 00
B. Harte, consul, Glasgow	500 00
H. O. Hoffter, consul, Leipsic	211 95
E. R. Jones, consul, Cardiff	203 36
W. Kaster, jr., vice-consul, Mannheim	120 74
C. Kahlo, consul, Sydney	200 00
W. King, consul, Birmingham	600 00
W. B. Lovie, consul, Cardiff	101 68
J. M. Langston, consul, Hayti	750 00
J. A. Leonard, consul, Leith	600 00
E. E. Lane, consul, Tunstall	350 00
J. T. Mason, consul, Dresden	750 00
J. S. Martin, jr., consul, Marseilles	708 19
J. S. Mosby, consul, Hong-Kong	1,125 00
E. A. Merritt, consul-general, London	1,000 00
G. F. Mosher, consul, Sonneberg	500 00
F. H. Mason, consul, Basle	96 44
H. Mattson, consul, Calcutta	250 00
G. H. Owen, consul, Messina	200 00
W. P. Pierce, consul, Cienfuegos	125 25
B. F. Peixotto, consul, Lyons	750 00
J. S. Potter, consul, Crefeld	1,125 00
E. H, Plumacher, consul, Maracaibo	200 00
C. A. Phelps, consul, Prague	300 00
S. B. Packard, consul, Liverpool	1,250 00
J. L. Parish, consul, Chemnitz	375 00
J. T. Robeson, consul, Beirut	477 00
G. W. Roosevelt, consul, Bordeaux	500 00
S. P. Stearns, consul, Montreal	900 00
A. D. Shaw, consul, Manchester	750 00
W. P. Sutton, consul, Matamoros	600 00
D. H. Strother, consul, Mexico	450 00
O. M. Spencer, consul, Melbourne	750 00
A. G. Studer, consul, Singapore	781 23
Carried forward	**28,072 29**

Allowance for consular clerks, 1884—Continued.	
Brought forward	$28,072 29
To J. Smith, consul, Nottingham	300 00
W. Schoenle, consul, Barmen	600 00
E. M. Smith, consul, Mannheim	331 82
J. H. Steuart, consul, Antwerp	500 00
M. H. Twitchell, consul, Kingston	300 00
O. V. Tousley, consul, Leipsic	288 05
F. Vogeler, consul, Frankfort	750 00
T. B. Van Buren, consul-general, Kanagawa	197 25
W. L. Welsh, consul, Florence	472 50
J. R. Weaver, consul, Vienna	1,125 00
G. Walker, consul-general, Paris	1,000 00
W. B. Wells, consul, Dundee	400 00
A. B. Wood, consul, Belfast	400 00
C. B. Webster, consul, Sheffield	500 00
D. B. Warner, consul, St. John	100 00
J. M. Wilson, consul, Bremen	1,050 00
	36,386 91
Allowance for consular clerks, 1883:	
To T. Adamson, consul, Panama	195 05
C. M. Allen, consul, Bermuda	50 00
C. C. Andrews, consul, Rio de Janeiro	500 00
A. Badeau, consul, Havana	1,900 00
S. P. Bayley, consul, Palermo	300 00
J. M. Bailey, consul, Hamburg	375 00
S. H. M. Byers, consul, Zurich	150 00
M. S. Brewer, consul, Berlin	375 00
M. J. Cramer, consul, Berne	133 33
S. W. Cooper, consul, Gothenberg	31 50
G. L. Catlin, consul, Stuttgart	150 00
A. V. Dockery, consul, Leeds	100 00
O. N. Denny, consul-general, Shanghai	1,000 00
L. DeR. Du Verge, consul, St. Paul de Loando	198 91
D. C. Duncan, consul, Naples	157 50
D. Eckstein, consul, Amsterdam	100 00
C. C. Ford, consul. Sagua la Grande	66 66
W. G. Frye, consul, Halifax	201 35
P. Figyelmesy, consul, Demerara	255 10
J. J. Flinn, consul, Chemnitz	375 00
A. P. Francia, consul, Genoa	150 00
J. B. Glover, consul, Havre	375 00
W. F. Grinnell, consul, Bradford	300 00
B. Harte, consul, Glasgow	250 00
G. H. Horstman, consul, Nuremberg	250 00
A. Jourdan, consul, Algiers	100 00
W. King, consul, Birmingham	300 00
E. E. Lane, consul, Tunstall	185 00
J. A. Leonard, consul, Leith	200 00
J. M. Langston, consul, Hayti	137 52
J. S. Mosby, consul, Hong-Kong	625 00
H. Mattson, consul, Calcutta	500 00
E. A. Merritt, consul, London	1,000 00
J. T. Mason, consul, Dresden	250 00
J. S. Martin, jr., consul, Marseilles	250 00
G. F. Mosher, consul, Sonneberg	250 00
H. C. Marston, consul, Malaga	100 00
S. B. Packard, consul, Liverpool	1,250 00
Carried forward	**13,086 92**

Allowance for consular clerks, 1883—Continued.		
Brought forward		$13,086 92
To W. P. Pierce, consul, Cienfuegos		68 00
B. F. Peixotto, consul, Lyons		375 00
C. A. Phelps, consul, Prague		200 00
J. S. Potter, consul, Crefeld		375 00
J. T. Robeson, consul, Beirut		159 00
F. W. Rice, consul, Colon		692 96
G. W. Roosevelt, consul, Bordeaux		312 50
W. W. Randall, consul, Sabanilla		100 00
S. P. Stearns, consul, Montreal		300 00
W. P. Sutton, consul, Matamoros		200 00
W. W. Sykes, consul, Cardiff		101 70
E. M. Smith, consul, Mannheim		150 00
W. Schoenle, consul, Barmen		200 00
J. H. Steuart, consul, Antwerp		250 00
J. Smith, consul, Nottingham		100 00
A. G. Studer, consul, Singapore		260 41
O. M. Spencer, consul, Melbourne		250 00
D. H. Strother, consul, Mexico		150 00
A. D. Shaw, consul, Manchester		375 00
M. H. Twitchell, consul, Kingston		100 00
R. W. Turpin, consul, Panama		305 06
O. V. Tousley, consul, Leipsic		250 00
H. A. Taylor, consul, Marseilles		4 09
F. Visich, consul, Trieste		10 99
F. Vogeler, consul, Frankfort		782 00
T. B. Van Buren, consul-general, Kanagawa		188 28
A. B. Wood, consul, Belfast		600 00
G. Walker, consul general, Paris		1,000 00
J. M. Wilson, consul, Bremen		1,350 00
J. R. Weaver, consul, Vienna		375 00
C. B. Webster, consul, Sheffield		250 00
W. L. Welsh, consul, Florence		150 00
W. B. Wells, consul, Dundee		200 00
F. C. Zimmerman, consul, Chemnitz		375 00
		23,646 91
Deduct repayments:		
By appropriation account	$157 91	
H. C. Marston	200 00	
		357 91
		23,289 00
Allowance for consular clerks, 1882:		
To A. B. Cobb, consul, Calcutta		127 71
J. M. Wilson, consul, Bremen		252 28
		379 99
Deduct repayment:		
By J. M. Wilson		91
		379 08
Salaries, interpreters to consulates in China, Japan, and Siam, 1884:		
To L. Bergholz, consul, Chinkiang		250 00
J. J. F. Bandinel, interpreter, Newchwang		393 75
J. P. Cowles, consul, Foochow		1,500 00
F. D. Cheshire, jr., consul, Foochow		454 86
O. N. Denny, consul-general, Shanghai		500 00
W. E. Goldsborough, consul, Amoy		562 50
Carried forward		3,661 11

Salaries, interpreters to consulates in China, Japan, and Siam, 1884—Continued.		
Brought forward		$3,661 11
To J. A. Halderman, consul, Bangkok		375 00
A. C. Jones, consul, Nagasaki		375 00
S. Merrill, consul, Jerusalem		160 50
J. S. Mosby, consul, Hong-Kong		187 50
L. W. Pilcher, consul, Tientsin		1,020 00
E. Stevens, consul, Ningpo		330 75
C. Seymour, consul, Canton		937 50
J. Stahel, consul, Osaka and Hiogo		287 66
I. F. Shepard, consul, Hankow		573 96
E. J. Smithers, consul, Chinkiang		125 00
T. B. Van Buren, consul, Kanagawa		1,000 00
J. C. Zuck, consul, Tientsin		510 00
		9,543 98
Salaries, interpreters to consulates in China, Japan, and Siam, 1883:		
To L. Bergholz, consul, Chinkiang		125 00
J. J. F. Bandinel, interpreter, Newchwang		131 25
J. P. Cowles, jr., consul, Foochow		500 00
O. N. Denny, consul-general, Shanghai		1,939 92
W. E. Goldsborough, consul, Amoy		187 50
J. A. Halderman, consul, Bangkok		187 50
A. C. Jones, consul, Nagasaki		125 00
J. S. Mosby, consul, Hong-Kong		375 00
L. W. Pilcher, consul, Tientsin		510 00
E. Stevens, consul, Ningpo		360 00
I. F. Shepard, consul, Hankow		191 32
C. Seymour, consul, Canton		312 50
J. Stahel, consul, Osaka and Hiogo		125 00
T. B. Van Buren, consul-general, Kanagawa		1,400 00
J. C. Zuck, consul, Tientsin		382 50
		6,852 49
Deduct repayment:		
By appropriation account		72 77
		6,779 72
Salaries, consular officers, not citizens, 1884:		
To A. P. Ambrose, consul, Port Louis		160 91
F. Belli, consul, Palermo		513 47
N. D. Comanos, consul, Cairo		640 16
C. A. Carrol, consul, St. Helena		44 95
J. Dittmer, consul, Stettin		75 17
A. Destruge, consul, Guayaquil		189 50
J. Hutchinson, consul, Funchal		480 42
C. A. Hirschfelder, consul, Toronto		500 00
W. Koster, jr., consul, Mannheim		97 82
W. B. Lovie, consul, Cardiff		557 72
G. F. Lincoln, consul, Aix la Chapelle		130 43
A. Moller, jr., consul, Valparaiso		283 66
F. Visich, consul, Trieste		1,500 00
A. Vial, consul, Nice		829 11
		6,033 32

Salaries, consular officers, not citizens, 1883:
To N. D. Comanos, consul, Cairo.. $1,695 49
A. Moller, jr., Valparaiso 397 76
F. Visich, consul, Trieste 445 06
2,538 31

Salaries, consular officers, not citizens, 1882:
To N. D. Comanos, consul, Cairo.. 272 36

Salaries, marshals for consular courts, 1884:
To J. A. Bigelow, consul-general, Constantinople..... 825 00
F. D. Cheshire, consul, Shanghai 500 00
O. N. Denny, consul, Shanghai 250 00
A. C. Jones, consul, Nagasaki 750 00
L. W. Pilcher, consul, Tientsin 510 00
I. F. Shepard, consul, Hankow 765 30
J. Stahel, consul, Osaka and Hiogo..... 400 00
H. S. Van Buren, marshal, Kanagawa 500 00
T. B. Van Buren, consul-general, Kanagawa 250 00
J. C. A. Wingate, consul, Foochow..... 630 97
J. C. Zuck, consul, Tientsin... 255 00
5,636 27

Salaries, marshals for consular courts, 1883:
To J. A. Bigelow, consul-general, Constantinople..... 275 00
J. J. F. Bandinel, marshal, Newchwang 157 50
O. N. Denny, consul, Shanghai 250 00
A. C. Jones, consul, Nagasaki. 250 00
I. F. Shepard, consul, Hankow 255 10
H. S. Van Buren, marshal, Kanagawa 250 00
J. C. Zuck, consul, Tientsin .. 255 00
1,692 60
Deduct repayments:
By appropriation account $135 30
J. J. F. Bandinel ... 157 50
292 80
1,399 80

Boat and crew for consul at Osaka and Hiogo, 1884:
To J. Stahel, consul, Osaka and Hiogo..... 79 12

Boat and crew for consul at Osaka and Hiogo, 1883:
To J. Stahel, consul, Osaka and Hiogo 247 37

Steam launch for legation and consulate at Constantinople, 1884:
To L. Wallace, minister, Turkey.. 1,000 00

Expenses of interpreters, guard, &c., Turkish dominions, 1884:
To N. D. Comanos, consul, Cairo.. 130 62
G. H. Heap, consul-general, Constantinople..... 618 75
Morton, Rose & Co., bankers, London 500 00
S. Merrill, consul, Jerusalem.. 321 00
J. T. Robeson, consul, Beirut . 477 00
W. E. Stevens, consul, Smyrna 461 77
2,509 14

Expenses of interpreters, guards, &c., Turkish dominions, 1883:
To G. H. Heap, consul-general, Constantinople $206 25
W. E. Stevens, consul, Smyrna 131 00
337 25
By appropriation account..... $56 25
Morton, Rose & Co..... 624 98
681 23
Excess of repayments.... 343 98

Loss on bills of exchange, consular service, 1884:
To A. A. Garguilo, consul, Turkey 82
F. A. Matthews, consul, Tangier 18 00
18 82

Loss on bills of exchange, consular service, 1883:
To appropriation account 6,331 72
A. A. Garguilo, consul, Turkey 11 55
6,343 27

Contingent expenses of consulates, 1884:
To H. C. C. Astwood, consul, St. Domingo 263 97
L. T. Adams, consul, Genoa... 225 01
C. C. Andrews, consul, Rio de Janeiro 1,032 24
D. Atwater, consul, Tahiti.... 38 00
C. M. Allen, consul, Bermuda.. 49 77
H. L. Atherton, consul, Pernambuco 146 29
T. Adamson, consul, Panama . 494 75
L. H. Ayme, consul, Merida... 378 20
A. P. Ambrose, consul, Mannheim 41 25
B. H. Barrows, consul, Dublin 552 30
L. Bergholz, consul, Chinkiang 441 88
C. P. Barnard, consul, Leghorn 121 90
C. Bartlett, consul, Guadeloupe 132 47
W. S. Bird, consul, La Guayra. 186 03
H. M. Brent, consul, Callao ... 58 94
W. C. Burchard, consul, Ruatan 33 80
F. W. Ballow, consul, Kehl... 83 59
L. C. Bacon, consul, Samana. 12 00
M. S. Brewer, consul, Berlin. 1,243 15
S. P. Bayley, consul, Palermo 428 10
H. N. Beach, consul, Guayaquil 231 44
E. L. Baker, consul, Buenos Ayres..... 648 34
J. M. Bailey, consul, Hamburg 650 55
F. Belli, consul, Palermo..... 425 33
S. F. M. Byers, consul, Zurich 522 22
J. J. F. Bandinel, consul, Newchwang..... 94 50
C. C. Bancroft, consul, Calcutta... ..... 708 68
C. A. Boush, consul, Collingwood 14 43
N. D. Comanos, consul, Cairo. 391 87
D. J. Crain, consul, Milan... 188 76
G. L. Catlin, consul, Stuttgart 499 92
S. W. Cooper, consui, Gothenburg..... 158 00
E. Conroy, consul, St. Juan, Porto Rico..... 216 94
R. C. Campbell, consul, Monterey 57 45
G. C. Campbell, consul, Gaboon 133 10
Carried forward..... 11,905 08

1883–'84. DIPLOMATIC.

Contingent expenses of consulates, 1884—Continued.	
Brought forward	$11,905 08
To F. M. Cheney, consul, Zanzibar	46 10
P. Carroll, consul, Port Stanley	120 00
A. J. Cassard, consul, Tampico	244 55
C. A. Carroll, consul, St. Helena	145 36
T. Canisius, consul, Apia	16 11
J. G. Crawford, consul, Coaticook	232 46
F. D. Cheshire, consul, Shanghai	1,644 75
R. S. Chilton, consul, Goderich	100 17
J. T. DuBois, consul, Aix la Chapelle	260 30
A. V. Dockery, consul, Leeds	421 90
J. Dittmer, consul, Breslau	25 67
H. Davy, consul, Newcastle	100 72
J. C. Dutcher, consul, Port Hope	18 45
D. Duer, jr., consul, Lisbon	123 79
D. M. Dunn, consul, Valparaiso	471 85
S. W. Dabney, consul, Fayal	7 81
J. De Carricoste, consul, Corunna	97 15
A. Destruge, consul, Guayaquil	19 80
M. A. Elfwing, consul, Stockholm	65 09
C. Ewers, consul, Windsor	92 01
D. Eckstein, consul, Amsterdam	547 72
W. G. Frye, consul, Halifax	547 48
J. Fletcher, consul, Genoa	347 72
C. C. Ford, consul, Sagua la Grande	70 70
A. Fish, consul, St. Hyacinthe	99 23
J. L. Frisbie, consul, Rheims	47 05
B. F. Farnham, consul, Bombay	42 33
P. Figyelmesy, consul, Demerara	207 50
E. O. Fechet, consul, Paso del Norte	165 83
A. Francis, consul, Victoria	78 25
J. B. Glover, consul, Havre	416 18
W. H. Garfield, consul, Martinique	128 50
G. W. Griffin, consul, Auckland	716 57
F. G. Gade, consul, Bergen	28 00
G. Gade, consul, Christiania	41 30
W. F. Grinnell, consul, Bradford	813 06
W. E. Goldsborough, consul, Amoy	448 62
G. Gifford, consul, Basle	24 88
G. E. Hoskinson, consul, Kingston	497 47
J. F. Hazelton, consul, Hamilton	93 50
J. W. Harper, consul, Munich	223 93
G. H. Heap, consul, Constantinople	553 63
J. Hutchinson, consul, Funchal	165 79
E. Howard, consul, Hull	82 50
B. G. Haynes, consul, Cadiz	104 45
F. G. Haughwout, consul, Naples	250 60
T. Hertzberg, consul, St. Etienne	67 45
G. E. Hubbard, consul, Mayaguez	44 25
F. Hannon, consul, Stanbridge	62 72
J. A. Halderman, consul, Bangkok	148 72
Carried forward	22,225 05

Contingent expenses of consulates, 1884—Continued.	
Brought forward	$22,225 05
To G. H. Horstman, consul, Nuremberg	224 82
S. P. Hubbell, consul, St. John's	123 35
B. Harte, consul, Glasgow	496 93
R. Y. Holley, consul, Barbadoes	150 00
W. E. Howard, consul, Toronto	135 75
D. K. Hobart, consul, Windsor	69 94
O. Hatfield, consul, Batavia	151 15
C. A. Hirschfelder, consul, Toronto	135 35
H. O. Heffter, consul, Leipsic	147 64
E. Hancock, consul, Patras	45 00
E. Johnson, consul, Pictou	210 15
A. C. Jones, consul, Nagasaki	405 88
A. Jourdan, consul, Algiers	10 28
C. E. Jackson, consul, Antigua	128 94
H. M. James, consul, Port Rowan	29 29
C. Kahlo, consul, Sydney	467 76
E. G. Kelton, consul, Mazatlan	55 65
F. J. Kieckhoefer, disbursing clerk	10,000 00
H. Keifer, consul, Stettin	6 55
W. King, consul, Birmingham	176 90
J. A. Leonard, consul, Leith	458 41
G. F. Lincoln, consul, Aix la Chapelle	281 49
M. A. Ledet, consul, Tuxpan	53 26
J. A. Lewis, consul, Sierra Leone	78 36
P. Lange, consul, St. Stephen	162 88
J. C. Landreau, consul, Santiago de Cuba	377 24
L. A. Lothrop, consul, Bristol	324 53
A. Lapoint, consul, Lambayeque	63 67
E. E. Lane, consul, Tunstall	359 20
W. B. Lovie, consul, Cardiff	190 00
J. Low, consul, Clifton	40 50
A. Livermore, consul, Londonderry	46 88
R. Locke, consul, Newcastle	176 52
H. S. Lasar, consul, Port Stanley	147 90
R. C. Morgan, disbursing clerk	40,000 00
Morton, Rose & Co., bankers, London	800 00
H. B. McKay, consul, Teneriffe	107 74
D. A. McKinley, consul, Honolulu	1,017 74
J. S. Martin, jr., consul, Marseilles	354 80
J. T. Mason, consul, Dresden	195 75
A. Mathe, consul, Sonsonate	12 50
J. A. McKnight, consul, St. Helena	79 85
T. J. McLain, jr., consul, Nassau	271 16
F. H. Moore, consul, Basle	161 46
E. A. Merritt, consul, London	2,335 33
S. Merrill, consul, Jerusalem	243 74
E. P. Mussey, consul, Mahé	84 52
T. N. Molloy, consul, St. John's, N. F	82 54
F. H. Mason, consul, Basle	707 46
G. F. Mosher, consul, Sonneberg	302 77
J. W. Merriam, consul, Iquique	60 13
W. Morey, consul, Ceylon	276 43
H. Mattson, consul, Calcutta	430 27
F. A. Matthews, consul, Tangiers	232 00
J. Mathé, consul, Sonsonate	36 75
Carried forward	85,950 16

Contingent expenses of consulates, 1884—Continued.		
Brought forward	$85,950	16
To B. Mackey, consul, Rio Grande do Sul	34	15
H. C. Miller, consul, Guayaquil	101	22
W. E. Mayer, consul, Para	77	90
McW. B. Noyes, consul, Venice	97	76
G. H. Owen, consul, Messina	286	60
E. L. Oppenheim, consul, Cadiz	132	42
H. Pease, consul, Santiago, C. V. I.	84	30
J. S. Potter, consul, Crefeld	684	86
B. F. Peixotto, consul, Lyons	1,257	49
E. H. Plumacher, consul, Maracaibo	260	20
W. A. Preller, consul, Rio Grande do Sul	20	22
A. C. Prindle, consul, Para	260	25
G. P. Pomeroy, consul, Cairo	1,113	95
W. P. Pierce, consul, Cienfuegos	337	61
B. J. Pridjeon, consul, Piedras Negras	85	55
J. J. Piatt, consul, Cork	258	71
S. D. Pace, consul, Port Sarnia	129	61
F. W. Prince, consul, Belleville	14	01
F. Paul, consul, Odessa	429	79
L. R. Peck, consul, Fort Erie	120	93
L. W. Pilcher, consul, Tientsin	643	15
C. A. Phelps, consul, Prague	121	56
S. B. Packard, consul, Liverpool	1,726	93
J. L. Parish, consul, Chemnitz	190	15
T. T. Prentiss, consul, Port Louis	345	30
D. T. Reed, consul, Madrid	75	41
A. Rhodes, consul, Elberfeld	127	45
R. B. Robbins, consul, Ottawa	192	85
L. Richmond, consul, Rome	550	44
J. T. Robeson, consul, Beirut	330	72
H. B. Ryder, consul, Copenhagen	591	39
W. T. Rice, consul, Horgen	341	08
A. L. Russell, consul, Montevideo	163	98
G. W. Roosevelt, consul, Bordeaux	370	58
C. A. Rand, consul, Sorel	61	90
S. P. Stearns, consul, Montreal	906	81
C. Seymour, consul, Canton	953	36
J. Smith, consul, Nottingham	591	36
S. Spackman, consul, Cologne	411	98
A. D. Shaw, consul, Manchester	755	73
W. Schoenle, consul, Barmen	634	76
W. P. Sutton, consul, Matamoros	903	55
N. K. Sawyer, consul, Turks Island	33	95
H. J. Sprague, consul, Gibraltar	71	69
W. E. Stevens, consul, Smyrna	489	73
V. V. Smith, consul, St. Thomas	254	87
F. H. Scheuch, consul, Barcelona	280	45
E. Stanton, consul, St. Petersburg	489	04
H. L. Slaght, consul, Prescott	150	75
H. Sterne, consul, Buda	48	75
J. A. Sutter, consul, Acapulco	293	52
L. B. Smith, consul, Curaçao	11	60
J. W Siler, consul, Cape Town	314	66
J. Stahel, consul, Hiogo	433	89
Carried forward	105,601	03

Contingent expenses of consulates, 1884—Continued.		
Brought forward	$105,601	03
To W. W. Sikes, cousul, Cardiff	25	15
I. F. Shepard, consul, Hankow	484	67
A. G. Studer, consul, Singapore	382	70
E. M. Smith, consul, Mannheim	254	57
J. H. Steuart, consul, Antwerp	345	60
S. H. Smith, consul, Nuevo Laredo	47	45
O. M. Spencer, consul, Melbourne	717	51
T. Simpson	66	80
E. Stevens, consul, Ningpo	446	33
D. J. Strother, consul, Mexico	343	65
E. J. Smithers, consul, Gibraltar	283	17
O. V. Tousley, consul, Leipsic	188	72
L. C. Tanner, consul, Verviers and Liege	236	65
J. W. Taylor, consul, Winnipeg	203	31
M. H. Twitchell, consul, Kingston	255	83
B. Tzschuck, consul, Vera Cruz	806	92
J. Turner, consul, Amherstburg	57	85
S. A. Touhey, consul, Rome	11	70
F. H. Titus, consul, Guatemala	56	24
W. Thompson, consul, Southampton	141	16
W. T. Townsend, consul, Woodstock	12	00
F. Vogeler, consul, Frankfort	680	69
A. Vial, consul, Nice	117	14
E. G. Van Riper, consul, Moscow	39	05
A. Van Camp, consul, Levuka	67	85
J. Viosca, consul, La Paz	64	90
J. G. Voight, consul, Manila	85	31
J. F. Van Ingen, consul, Talcahuano	49	06
T. B. Van Buren, consul, Kanagawa	891	07
D. Vickers, consul, Matanzas	331	35
F. Visich, consul, Trieste	222	40
W. L. Welsh, consul, Florence	240	37
J. R. Weaver, consul, Vienna	768	70
J. M. Wilson, consul, Bremen	769	39
W. D. Wamer, consul, Dusseldorf	55	50
R. Wickersham, consul, Castelamare	21	77
J. Worthington, consul, Malta	272	86
T. Wilson, consul, Nantes	150	44
J. N. Wasson, consul, Quebec	342	25
W. A. Worden, consul, Charlottetown	317	39
C. P. Williams, consul, Rouen	244	56
G. Walker, consul, Paris	2,198	07
J. B. Weaver, consul, Bahia	83	06
J. C. A. Wingate, consul, Foochow	496	19
W. T. Wright, consul, Santos	31	45
A. Willard, consul, Guaymas	22	52
W. B. Wells, consul, Dundee	379	21
J. F. Winter, consul, Rotterdam	307	35
D. B. Warner, consul, St. John	305	95
A. B. Wood, consul, Belfast	1,210	73
C. B. Webster, consul, Sheffield	339	40
A. M. Wood, consul, Castelamare	23	85
A. Woodcock, consul, Batavia	154	78
J. S. Williams, consul, Aden	75	95
J. Wilson, consul, Brussels	390	50
Carried forward	122,720	07

1883-'84. DIPLOMATIC.

Contingent expenses of consulates, 1884—Continued.		
Brought forward		$122,720 07
To R. M. Whitney, consul, Tamatave		56 35
E. E. White, consul, Puerto Cabello		80 63
F. C. Zimmerman, consul, Havana		235 75
		123,092 80
Deduct repayments:		
By J. G. Crawford	$82 75	
N. D. Comanos	130 62	
C. Kahlo	100 00	
F. J. Kieckhofer	5,000 00	
R. C. Morgan	17,617 00	
		22,930 37
		100,162 43
Contingent expenses United States consulates, 1883:		
To T. Adamson, consul, Panama		181 37
S. H. M. Byers, consul, Zurich		171 44
E. L. Baker, consul, Buenos Ayres		318 68
A. Badeau, consul-general, Havana		1,210 32
C. Bartlett, consul, Guadeloupe		71 59
G. L. Catlin, consul, Stuttgart		141 93
J. G. Crawford, consul, Coaticook		62 00
T. Canisius, consul, Apia		280 45
S. W. Cooper, consul, Gothenberg		64 50
D. J. Crain, consul, Milan		34 29
A. J. De Zeyk, consul, Turin		257 19
L. De R. Do Verge, consul, St. Paul de Loando		239 96
B. O. Duncan, consul, Naples		137 50
H. P. Dill, consul, Guelph		11 39
A. Destruge, consul, Guayaquil		224 97
D. Eickstein, consul, Amsterdam		131 32
C. Ewers, consul, Windsor		54 00
C. C. Ford, consul, Sagua la Grande		96 18
A. P. Francia, consul, Genoa		91 14
J. Farrell, consul, Bristol		204 32
J. B. Glover, consul, Havre		194 21
G. E. Hoskinson, consul, Kingston		375 48
O. Hatfield, consul, Batavia		45 38
D. K. Hobart, consul, Windsor		58 34
S. P. Hubbell, consul, St. John's		70 48
C. Kahlo, consul, Sydney		288 76
W. Köster, jr., consul, Mannheim		15 06
W. H. King, consul, Port Stanley		20 00
J. A. Leonard, consul, Leith		134 80
E. A. Merritt, consul, London		1,888 99
H. Mattson, consul, Calcutta		1,056 72
J. S. Martin, consul, Marseilles		69 43
F. H. Mason, consul, Basle		419 06
J. A. MacKnight, consul, St. Helena		84 29
G. F. Mosher, consul, Sonneberg		178 10
H. C. Marston, consul, Malaga		345 93
G. Nye, consul, Canton		105 00
S. B. Packard, consul, Liverpool		973 30
W. A. Preller, consul, Rio Grande do Sul		33 51
G. P. Pomeroy, consul, Cairo		477 53
A. C. Prindle, consul, Para		89 25
Carried forward		10,908 16

Contingent expenses of consulates, 1883—Continued.		
Brought forward		$10,908 16
To W. P. Pierce, consul, Cienfuegos		98 14
E. H. Plumacher, consul, Maracaibo		50 00
T. T. Prentiss, consul, Port Louis		122 04
F. W. Rice, consul, Colon		883 30
O. M. Spencer, consul, Melbourne		207 89
C. Seymour, consul, Canton		525 70
S. H. Smith, consul, Laredo		42 89
E. M. Smith, consul, Mannheim		109 50
E. J. Smithers, consul, Chinkiang		41 66
A. D. Shaw, consul, Manchester		350 26
M. H. Twitchell, consul, Kingston		40 57
B. Tzschuck, consul, Vera Cruz		246 08
R. W. Turpin, consul, Panama		303 75
G. C. Tanner, consul, Liege		108 46
F. Vogeler, consul, Frankfort		214 25
D. Vickers, consul, Matanzas		213 10
T. B. Van Buren, consul, Kanagawa		377 23
J. F. Van Ingen, consul, Talcahuano		12 27
A. B. Wood, consul, Belfast		556 82
G. Walker, consul, Paris		1,097 71
J. S. Williams, consul, Aden		114 56
W. T. Wright, consul, Santos		10 48
W. L. Welsh, consul, Florence		157 75
J. M. Wilson, consul, Bremen		196 59
A. G. Webster, consul, Hobart		61 33
A. Willard, consul, Guaymas		25 87
		17,076 36
Deduct repayments:		
By appropriation account	$1,327 81	
S. H. M. Byers	24 00	
O. N. Denny	9 10	
A. J. De Zeyk	84 00	
C. C. Ford	66 66	
R. C. Morgan	5,500 00	
F. H. Mason	22 50	
Morton, Rose & Co	132 59	
G. P. Pomeroy	250 00	
W. W. Sikes	58 47	
		7,475 13
		9,601 23
Contingent expenses United States consulates, 1882:		
To J. C. Kretchmar, consul, San Juan del Norte		58 35
W. W. Randall, consul, Sabanilla		53 60
J. M. Wilson, consul, Bremen		140 77
		252 72
Contingent expenses United States consulates, 1881 and prior years:		
By A. V. Dockery	$101 33	
R. C. Morgan	2,242 44	
J. Mathe	76 00	
F. Paul	8 50	
		2,428 27
Rent of prisons, wages of keepers, &c., for American convicts in Siam and Turkey, 1884:		
To J. A. Halderman, consul, Bangkok		450 00
W. E. Stevens, consul, Smyrna		309 43
		759 43

Rent of prisons, wages of keepers, &c., for American convicts in Siam and Turkey, 1883:
To G. H. Heap, consul-general, Constantinople $206 25
S. Merrill, consul, Jerusalem . 160 50
J. T. Robeson, consul, Beirut. 159 00
W. E. Stevens, consul, Smyrna 231 66
757 41

Deduct repayments:
By appropriation account. $62 28
G. H. Heap 206 25
W. E. Stevens 131 00
399 53
357 88

Rent of prisons for American convicts in China, 1884:
To F. D. Cheshire, consul-general, Shanghai 656 60

Rent of prisons for American convicts in China, 1883:
To O. N. Denny, consul-general, Shanghai 372 22

Wages of keepers, &c., prison for American convicts in China, 1884:
To J. J. F. Bandinel, consul, Newchwang 472 50
F. D. Cheshire, consul-general, Shanghai 2,899 58
O. N. Denny, consul-general, Shanghai 1,407 74
W. E. Goldsborough, consul, Amoy 858 76
L. W. Pilcher, consul, Tientsin 70 72
C. Seymour, consul, Canton .. 225 00
E. Stevens, consul, Ningpo ... 120 00
J. C. A. Wingate, consul, Foochow 225 00
J. C. Zuck, consul, Tientsin .. 35 36
6,314 66

Deduct repayments:
By F. D. Cheshire..... $656 60
O. N. Denny..... 580 99
E. Stevens 120 00
1,357 59
4,957 07

Wages of keepers, &c., prison for American convicts in China, 1883:
To J. J. F. Bandinel, consul, Newchwang 157 50
O. N. Denny, consul-general, Shanghai 743 35
W. E. Goldsborough, consul, Amoy 310 00
J. A. Halderman, consul, Siam. 250 00
E. Stevens, consul, Ningpo... 120 00
C. Seymour, consul, Canton .. 75 00
J. C. A. Wingate, consul, Foochow 225 00
J. C. Zuck, consul, Tientsin.. 524 96
2,405 81

Deduct repayments:
By appropriation account $42 06
E. Stevens 360 00
J. C. Zuck..... 489 60
801 66
1,514 15

Wages of keepers, &c., prison for American convicts in China, 1882:
To J. C. Zuck, consul, Tientsin .. 489 60

Rent of prisons for American convicts in Japan, 1884:
To T. B. Van Buren, consul, Kanagawa..... $300 00

Rent of prison for American convicts in Japan, 1883:
To T. B. Van Buren, consul-general, Kanagawa 150 00

Wages of keepers, &c., prison for American convicts in Japan, 1884:
To J. Stahel, consul, Osaka and Hiogo..... 357 96
T. B. Van Buren, consul, Kanagawa..... 844 28
1,202 24

Wages of keepers, &c., prison for American convicts in Japan, 1883:
To J. Stahel, consul, Osaka and Hiogo..... 173 86
T. B. Van Buren, consul, Kanagawa..... 460 97
634 83

Rent of court-house and jail in Japan, 1884:
To J. A. Bingham, minister, Japan 3,400 00

Buildings and grounds for legation in China, 1884:
To J. R. Young, minister, China.. 1,500 00

Buildings and grounds for legation in China, 1883:
To J. R. Young, minister, China.. 569 93

Bringing home criminals, 1884:
To A. Badeau, consul-general, Havana 264 62
Deduct repayment:
By F. J. Kieckhoefer..... 264 62

Bringing home criminals, 1883:
To H. L. Atherton, consul, Pernambuco..... 108 22
R. C. Morgan, disbursing clerk 1,500 00
1,608 22

Deduct repayments:
By appropriation account $5 15
Secretary of State.... 575 12
580 27
1,027 95

Bringing home criminals, 1882:
To T. B. Van Buren, consul-general, Kanagawa 250 00

Relief and protection of American seamen, 1884:
To H. L. Atherton, consul, Pernambuco..... 193 32
E. L. Baker, consul, Buenos Ayres..... 40 20
M. S. Brewer, consul, Berlin.. 101 50
R. S. Chilton, consul, Goderich 56 28
F. M. Cheney, consul, Zanzibar 443 93
D. M. Dunn, consul, Valparaiso 202 44
S. W. Dabney, consul, Fayal 374 30
J. P. Frecker, consul, St. Pierre 99 97
B. F. Farnham, consul, Bombay 610 39
W. G. Frye, consul, Halifax.. 258 82
J. M. Francis, consul, Lisbon. 299 04

Carried forward..... 2,680 19

1883–'84. DIPLOMATIC.

Relief and protection of American seamen, 1884—Continued.	
Brought forward	$2,680 19
To J. Fletcher, consul, Genoa	280 22
A. Francis, consul, Victoria	163 50
J. B. Glover, consul, Havre	260 80
G. W. Griffin, consul, Auckland	630 97
G. Gade, consul, Christiania	38 82
E. Howard, consul, Hull	472 85
D. K. Hobart, consul, Windsor	123 30
G. E. Hoskinson, consul, Kingston	450 07
G. H. Heap, consul-general, Constantinople	120 96
J. Hutchinson, consul, Funchal	15 34
E. Johnson, consul, Pictou	520 15
C. E. Jackson, consul, Antigua	208 96
M. A. Ledit, consul, Tuxpan	240 00
J. R. Lowell, minister, England	270 18
J. A. Lewis, consul, Sierra Leone	42 49
A. Lapoint, consul, Lambayeque	32 00
L. A. Lothrop, consul, Bristol	46 84
H. S. Lasar, consul, Port Stanley	86 79
T. N. Molloy, consul, St. John's	162 40
A. Moller, jr., consul, Valparaiso	92 00
Morton, Rose & Co., bankers, London	105 26
H. B. McKay, consul, Teneriffe	281 95
J. S. Martin, jr., consul, Marseilles	114 43
E. L. Oppenheim, consul, Cadiz	65 28
H. Pease, consul, Santiago, C. V. I	114 40
B. F. Peixotto, consul, Lyons	15 00
L. Richmond, consul, Rome	236 25
J. W. Siler, consul, Cape Town	2,620 49
A. D. Shaw, consul, Manchester	14 59
N. K. Sawyer, consul, Turks Island	139 88
J. A. Sutter, consul, Acapulco	53 93
A. A. Sargent, minister, Germany	101 50
V. V. Smith, consul, St. Thomas	120 91
W. Thompson, consul, Southampton	17 51
B. Tzschuck, consul, Vera Cruz	72 14
J. F. Van Ingen, consul, Talcahuano	310 56
D. Vickers, consul, Matanzas	31 93
J. G. Voight, consul, Manila	17 25
T. B. Van Buren, consul, Kanagawa	114 48
D. B. Warner, consul, St. John	157 55
A. G. Webster, consul, Hobart	70 81
J. Worthington, consul, Malta	14 06
Brig Arcot	21 00
Brig Arcadia	30 00
Brig David Bigbee	10 00
Brig Cora Green	30 00
Brig Chowan	10 00
Brig Gem	20 00
Brig Havana	13 50
Brig Motley	10 00
Brig W. J. Phillips	10 00
Brig Proteus	10 00
Bark Augustine Koble	31 50
Bark Annie Reed	50 00
Carried forward	12,074 99

Relief and protection of American seamen, 1884—Continued.	
Brought forward	$12,074 99
To Bark Atlantic	25 00
Bark Abram Barber	125 00
Bark Abd-el-Kader	10 00
Bark Alice C. Dickerman	10 00
Bark Adelaide	10 00
Bark Daring	10 00
Bark Dawn	50 00
Bark Grace Deering	10 00
Bark Francis Palmer	250 00
Bark José R. Lopez	40 00
Bark J. H. Ingersoll	10 00
Bark Lucretia	72 00
Bark Rainbow	50 00
Bark Rome	291 99
Bark T. Pope	360 00
Bark Ohio	25 00
Bark Ormus	10 00
Schooner Sarmiento	10 00
Schooner Sarah	250 00
Schooner Samuel Welsh	10 00
Schooner Spotless	10 00
Schooner Sea Breeze	50 00
Schooner Surprise	20 00
Schooner Scud	10 00
Schooner Veronica	130 00
Schooner Wanderer	75 00
Schooner Mary P. Clark	20 00
Schooner G. W. Preston	10 00
British steamer Castelea	50 00
British steamer Venice	20 00
British steamer Ponca	40 00
Italian bark Josip	63 26
English schooner Regina B	20 00
Oregon Railway and Navigation Company	3 00
Schooner Irene	14 00
Schooner W. H. Curry	150 00
Schooner G. Wilson	20 00
Schooner Mary Jane and Elizabeth	20 00
Schooner Lottie Beard	70 00
Schooner Ella A. Swift	50 00
Schooner Daybreak	30 00
Schooner Juliet	10 00
Schooner Clara Fletcher	20 00
Schooner Katie E. King	20 00
Schooner Page	200 00
Schooner Sophia Johnson	75 00
Schooner Nellie Treat	10 00
Schooner Kate Florence	10 00
Schooner Eva C. Yates	20 00
Schooner Hattie Weston	20 00
Schooner Martinique	20 00
Ship India	10 00
Ship Exporter	10 00
Steamer Advance	70 00
Steamer Acadia	150 00
Steamer Abyssinia	50 00
Steamer Acapulco	70 00
Steamer Alhambra	30 00
Steamer Alpha	20 00
Steamer Alps	20 00
Steamer Arabic	50 00
Steamer Adriatic	20 00
Steamer Angena	110 00
Steamer Alpin	20 00
Steamer Almeda	20 00
Steamer Bermuda	130 00
Steamer Baltic	10 00
Steamer Blanch Henderson	20 00
Steamer Colon	140 00
Steamer City of Tokio	20 00
Steamer City of Peking	60 00
Steamer City of Para	50 00
Steamer Cienfuegos	140 00
Steamer Carroll	70 00
Steamer City of Sydney	90 00
Steamer Colima	20 00
Steamer G. W. Clyde	40 00
Steamer Cleopatra	27 00
Carried forward	16,451 24

1883–'84. DIPLOMATIC.

Relief and protection of American seamen, 1884—Continued.		
Brought forward		$16,451 24
To Steamer Crescent City	10 00	
Steamer City of Rio de Janeiro	40 00	
Steamer D. J. Foley	40 00	
Steamer Egypt	10 00	
Steamer J. H. Freeman	50 00	
Steamer Finance	300 00	
Steamer Grecian Monarch	20 00	
Steamer Granada	10 00	
Steamer Indiana	10 00	
Steamer Lucy P. Miller	30 00	
Steamer New Brunswick	16 00	
Steamer North Pacific	12 00	
Steamer Metford	10 00	
Steamer Niagara	60 00	
Steamer Paris	125 00	
Steamer Reliance	140 00	
Steamer Samana	130 00	
Steamer G. E. Starr	60 00	
Steamer San Blas	50 00	
Steamer Santiago	30 00	
Steamer San Jose	10 00	
Steamer The Queen	10 00	
Steamer Tunstall	10 00	
Steamer Tobasco	10 00	
Steamer Worcester	310 00	
Steamer Wanderer	30 00	
The Duoite	20 00	
Vessel Daybreak	10 00	
		18,014 24
Deduct repayments:		
By T. C. Acton	$249 14	
D. Atwater	250 00	
T. Adamson	418 93	
H. L. Atherton	35 00	
C. C. Andrews	111 46	
H. D. Bennett	35 00	
H. M. Brent	233 47	
F. D. Cheshire	51 09	
S. W. Cooper	6 00	
T. M. Dawson	12 37	
D. Eckstein	38 00	
W. G. Frye	92 00	
J. Fletcher	199 22	
P. Figyelmesy	436 50	
G. W. Griffin	120 00	
J. F. Hartranft	135 00	
E. G. Kelton	422 80	
C. Kahlo	361 65	
J. R. Lowell	370 18	
J. A. MacKnight	134 44	
W. B. McKay	1 40	
H. Pease	3 99	
T. T. Prentiss	583 82	
A. G. Studer	262 34	
O. M. Spencer	203 19	
J. Stabel	186 48	
R. D. Tucker	51 94	
J. G. Voight	6 17	
J. F. Van Ingen	244 09	
T. B. Van Buren	1,058 80	
		6,314 47
		11,699 77
Relief and protection of American seamen, 1883:		
To E. L. Baker, consul, Buenos Ayres		276 32
B. H. Barrows, consul, Dublin		45 26
A. Badeau, consul, Havana		40 51
F. M. Cheney, consul, Zanzibar		735 94
T. Canisius, consul, Apia		21 39
L. DeR. DuVerge, consul, St. Paul de Loando		286 58
W. G. Frye, consul, Halifax		394 38
J. P. Frecker, consul, St. Pierre		141 05
J. M. Francis, minister, Portugal		14 49
Carried forward		1,955 92

Relief and protection of American seamen, 1883—Continued.		
Brought forward		$1,955 92
To A. Francis, consul, Victoria		228 75
G. W. Griffin, consul, Auckland		36 41
G. E. Hoskinson, consul, Kingston		315 25
E. Howard, consul, Hull		74 04
D. K. Hobart, consul, Windsor		6 00
G. H. Holt, consul, Gaspé Basin		23 01
E. Johnson, consul, Pictou		271 72
E. R. Jones, consul, Newcastle		20 35
H. S. Lasar, consul, Port Stanley		1,012 74
T. N. Molloy, consul, St. John's		124 28
A. Moller, jr., consul, Valparaiso		1,100 61
A. Morrill, consul, San José		11 55
J. H. Moore, consul, Callao		122 12
E. A. Merritt, consul, London		368 74
McW. B. Noyes, consul, Venice		12 52
R. S. Newton, consul, St. Paul de Loando		1,095 60
H. Pease, consul, Santiago		24 38
J. J. Piatt, consul, Cork		74 03
F. W. Rice, consul, Colon		22 50
A. L. Russell, consul, Montevideo		96 10
W. W. Randall, consul, Sabanillo		365 75
S. P. Stearns, consul, Montreal		16 00
W. W. Sikes, consul, Cardiff		58 47
N. K. Sawyer, consul, Turks Island		139 40
J. W. Siler, consul, Cape Town		106 82
L. D. Syle, consul, Funchal		238 08
A. D. Shaw, consul, Manchester		13 68
W. H. Trumbull, consul, Zanzibar		48 04
J. J. Thibault, consul, Tuxpan		40 50
B. Tzschuck, consul, Vera Cruz		420 06
D. Vickers, consul, Matanzas		23 75
J. F. Van Ingen, consul, Talcahuano		467 45
A. Van Camp, consul, Levuka		157 44
J. B. Weaver, consul, Bahia		6 00
W. W. Woodhull		73 25
R. M. Whitney, consul, Tamatave		172 07
J. S. Williams, consul, Aden		78 13
Bark Eliza White		18 00
Bark C. L. Pearson		10 00
Bark Glencida		20 00
Bark J. H. Bowe		10 00
Bark Olustee		10 00
Bark Sonoma		20 00
Bark Jas. S. Stone		10 00
Bark Sarah		10 00
Bark Eliza		25 00
Bark Rainbow		75 00
British brig Italia		30 00
Brig Rising Sun		10 00
Brig Harriet G		30 00
Ship Independence		20 00
Ship Anahuae		150 00
Schooner South Shore		150 00
Schooner R. B. Handy		75 00
Steamer New Brunswick		164 00
Steamer Carroll		320 00
Steamer Worcester		100 00
Steamer North Pacific		21 00
Steamer Geo. E. Starr		3 00
Carried forward		10,702 51

1883–'84. DIPLOMATIC.

Relief and protection of American seamen, 1883—Continued.
Brought forward $10,702 51
To Steamer Dominion 12 00
Steamer Alpha 14 00
Steamer British Crown 10 00
Steamer Granada 10 00
Steamer Santiago 60 00
Steamer City of Sydney 20 00
Steamer Illinois 10 00
Steamer Finance 20 00
Steamer Mariposa 10 00
10,868 51

Deduct repayments:
By D. Atwater $147 00
J. L. Atwood 40 00
H. L. Atherton 66 44
Appropriation account 178 32
F. M. Cheney 443 93
O. N. Denny 757 11
C. C. Ford 36 35
A. Francia 53 57
W. Morey 100 00
Morton, Rose & Co. 24,800 00
J. A. MacKnight 231 32
D. A. McKinley 211 30
McW. B. Noyes 12 52
O. M. Spencer 207 89
A. G. Studer 86 85
J. Stahel 185 00
E. L. Sullivan 33 90
R. W. Turpin 482 62
T. M. Terry 842 00
R. D. Tucker 47 50
T. B. Van Buren 1,050 52
R. M. Whitney 172 07
W. T. Wright 10 48
A. G. Webster 61 33
$30,258 02

Excess of repayments 19,389 51

Relief and protection of American seamen, 1882:
To appropriation account 1,206 85
E. Backus, consul, Para 124 23
J. Farrell, consul, Bristol 12 99
G. Gifford, consul, Nantes 1 80
T. Wilson, consul, Ghent 1 17
Bark Sea Breeze 125 00
Bark Eliza 50 00
Steamer G. E. Starr 6 00
1,528 04

Deduct repayments:
By A. Barnes $49 86
G. M. Dean 24 00
S. C. Fessenden 95 06
E. J. Pennypacker 79 85
F. Paul 20 00
A. Rhodes 54 80
323 57

1,204 47

Relief and protection of American seamen, 1881, and prior years:
By A. Gentle 73 89
E. Jacobs 124 62
H. S. Loring 1,640 29
J. M. Morton 357 71
J. F. Swords 68 00
2,264 51

Rescuing shipwrecked American seamen, 1884:
To J. Fletcher, consul, Geneva 199 22
F. J. Kieckhoefer, disbursing clerk 1,500 00
R. C. Morgan, disbursing clerk 109 41
1,808 63

Rescuing shipwrecked American seamen, 1883:
To R. C. Morgan, disbursing clerk $519 08
E. A. Merritt, consul, London 368 74
887 82

Deduct from repayments:
By appropriation account $0 50
R. C. Morgan 461 92
E. A. Merritt 368 74
Secretary of State 100 00
931 16

Excess of repayments 43 34

Shipping and discharging seamen, 1884:
To J. M. Bailey, consul, Hamburg 400 00
E. R. Jones, consul, Cardiff 77 99
W. B. Lovie, consul, Cardiff 178 81
E. A. Merritt, consul, London 178 10
S. B. Packard, consul, Liverpool 1,050 00
W. W. Sikes, consul, Cardiff 93 20
A. B. Wood, consul, Belfast 150 00
2,128 10

Shipping and discharging seamen, 1883:
To J. M. Bailey, consul, Hamburg 200 00
E. A. Merritt, consul, London 81 00
S. B. Packard, consul, Liverpool 1,050 00
W. W. Sikes, consul, Cardiff 175 00
A. B. Wood, consul, Belfast 75 00
1,581 00

Expenses under the neutrality act, 1884:
To F. J. Kieckhoefer, disbursing clerk 5,000 00
R. C. Morgan, disbursing clerk 5,326 56
10,326 56

Deduct repayments:
By F. J. Kieckhoefer $270 47
R. C. Morgan 56 09
326 56

10,000 00

Expenses under the neutrality act, 1883:
To F. J. Kieckhoefer, disbursing clerk 15,000 00
R. C. Morgan 3,000 00
18,000 00

Deduct repayments:
By R. C. Morgan 106 20
17,893 80

Expenses under the neutrality act, 1881 and prior years:
By R. C. Morgan $1,900 00

Annual expenses of Cape Spartel Light, 1884:
To F. A. Matthews, consul, Tangier 285 00

Allowance to widows, &c., diplomatic officers who died abroad, 1884:
To J. S. J. Eaton 75 68
W. H. Hunt, minister, Russia 98 90
A. Jourdan, consul, Algiers 2,180 00
J. C. Moore, consul, Callao 380 44
A. C. Prindle, consul, Para 164 84
W. W. Sikes, consul, Cardiff 108 70
3,008 56

1883-'84. DIPLOMATIC.

Transporting remains of ministers and consuls for interment:
To F. J. Kieckhoefer, disbursing clerk $500 00
R. C. Morgan, disbursing clerk 130 69
Morton, Rose & Co., bankers, London 1,424 66
G. E. Rice, consul, Kanagawa. 360 43
2,415 78

Publication of consular and other commercial reports, 1884:
To F. J. Kieckhoefer, disbursing clerk 11,637 39
R. C. Morgan, disbursing clerk 15,000 00
26,637 39
Deduct repayment:
By R. C. Morgan 6,637 39
20,000 00

Publication of consular and other commercial reports, 1883:
By R. C. Morgan $293 00

Publication of consular and other commercial reports, 1882:
By R. C. Morgan $1,561 65

International Bureau of Weights and Measures, 1883 and 1884:
To L. P. Morton, minister, France 3,537 63

International remonetization of silver:
By Morton, Rose & Co. $2,496 39

International Fishery Exhibition of 1883, at London:
To Morton, Rose & Co., bankers, London 10,000 00

International Bimetallic Commission:
By Morton, Rose & Co . $9,027 49

Joint Commission for the settlement of claims between the United States and the French Republic:
To A. O. Aldis 6,000 00
W. F. Peddrick 54,000 00
60,000 00
Deduct repayments:
By Secretary of State .. $3,706 46
Treasurer United States 10,139 16
13,845 62
46,154 38

International Exhibition for the Establishment of Electrical Units:
To F. J. Kieckhoefer, disbursing clerk 3,500 00
R. C. Morgan, disbursing clerk 5,000 00
8,500 00

International Exchange, Smithsonian Institution:
To Smithsonian Institution 5,375 00

Commission to negotiate a commercial treaty with Mexico:
To U. S. Grant 1,000 00
W. H. Trescot 1,000 00
J. F. Vals 208 33
2,208 33

Salary and burial expenses of George P. Marsh:
To Mrs. Caroline C. Marsh $11,019 23
R. C. Morgan, disbursing clerk 1,219 12
12,238 35

International Exhibition at Sydney and Melbourne, Australia, 1879 and 1880:
By R. C. Morgan $1,844 19
Morton, Rose & Co 150 64
1,994 83

Relief of J. J. Coffey and Rebecca S. Lewis:
To J. J. Coffey 350 00

Salaries and expenses Court of Commissioners Alabama Claims:
To A. H. Allen 150,000 00
H. C. Clarke 2,400 00
J. A. J. Creswell 8,000 00
A. French 6,000 00
D. W. Fessenden 3,000 00
J. Harlan 6,000 00
H. G. Wells 6,000 00
181,400 00

Salaries and expenses United States and Spanish Claims Commission, 1883:
To E. Collett 50 00

Salaries and expenses United States and Spanish Claims Commission, 1882:
To T. J. Durant 13 60

Contingent expenses, United States and Spanish Claims Commission, 1883:
By E. Collett $50 26

Estates of decedents trust fund:
To estate of G. E. Backus 61 00
E. Cook 333 52
W. G. Featherstone. 40 88
J. J. Higgins 118 42
J. Totlin 946 76
G. F. Shipley 1,070 94
T. A. Scipio 172 07
2,743 59
Deduct repayments:
By T. Adamson $144 89
A. Badeau 40 51
O. N. Denny 1,959 73
J. M. Francis 14 49
A. C. Jones 20 35
Morton, Rose & Co. 105 26
R. W. Turpin 56 01
D. Vickers 23 75
T. B. Van Buren 128 75
R. M. Whitney 172 07
E. E. White 40 88
2,706 69
36 90

Relief of claimants of private armed brig General Armstrong:
To J. A. Bresnahan 515 40
S. Potter (2d) 121 65
L. G. Savage 90 31
727 36

Expenses Universal Exhibition at Paris:
By Baring Bros. & Co..$23,651 10

1883–'84. JUDICIARY.

Salaries Department of Justice, 1884:
To J. M. Ewing $136,448 02

Contingent expenses Department of Justice, furniture and repairs, 1884:
To J. M. Ewing 750 00

Contingent expenses Department of Justice, books for Department library, 1884:
To J. M. Ewing 1,500 00

Contingent expenses Department of Justice, books, office of Solicitor, 1884:
To J. M. Ewing 500 00

Contingent expenses Department of Justice, stationery, 1884:
To J. M. Ewing 1,500 00

Contingent expenses Department of Justice, miscellaneous items, 1884:
To J. M. Ewing 7,160 00

Contingent expenses Department of Justice, horses and wagons, 1884:
To J. M. Ewing 1,200 00

Salaries employés court-house Washington, D. C., 1884:
To J. M. Ewing 8,160 70
C. McMichael 1,649 30
9,810 00

Salary warden of the jail, District of Columbia, 1884:
To J. M. Ewing 1,800 00

Repairs of court-house, Washington, D. C., 1884:
To J. M. Ewing 950 00

Expenses of Territorial courts in Utah, 1884:
To W. H. Dickson 270 00
D. W. Felshaw 10 70
E. A. Ireland 21,600 00
A. H. Norton 41 10
E. P. Sutherland 130 50
P. T. Van Zile 1,275 00
J. R. Wilkins 744 85
24,072 15

Expenses of Territorial courts in Utah, 1883:
To D. W. Felshaw 21 65
A. O. Smoot 74 80
P. T. Van Zile 976 00
1,072 45

Expenses of Territorial courts in Utah, 1882:
To E. A. Ireland 814 95

Expenses of Territorial courts in Utah, 1880 and prior years:
To W. Nelson 12 00

Defending suits in claims against the United States:
To Chicago, Rock Island and Pacific R. R. Co 14 30
J. M. Ewing 6,350 00
Utah Central Railway Co 4 00
Union Pacific R. R. Co 54 00
6,422 30

Prosecution and collection of claims, 1883:
To H. R. Probasco $15 00

Punishing violations of intercourse acts and frauds, 1884:
To J. B. Blanchard 731 65
G. E. Bartlett 199 50
A. C. Botkins 154 50
J. M. Ewing 3,000 00
4,085 65

Punishing violations of intercourse acts and frauds, 1883:
To J. B. Blanchard 306 87
J. M. Ewing 414 81
721 68
Deduct repayment:
By A. C. Botkins 187 45
534 23

Prosecution of crimes, 1884:
To J. M. Ewing 21,600 00
Union Pacific R. R. Co 65 90
21,665 90

Prosecution of crimes, 1883:
To J. M. Ewing 1,904 73

Support of convicts, 1884:
To Albany penitentiary 90 75
J. M. Ewing 1,200 00
Maryland penitentiary 148 50
1,439 25

Prosecution of crimes, 1883:
To Albany penitentiary 664 00
Maryland penitentiary 49 14
713 14

Prosecution of crimes, 1883:
To Albany penitentiary 146 00

Publishing supreme court reports, Territory of Wyoming, 1882:
To Banks & Bros 414 12
J. A. Riner 405 05
819 17

Payment to Henry Fink, United States marshal:
To H. Fink 108 80

Expenses of United States courts, 1879 and prior years:
To R. L. Hutchinson, marshal, New Jersey 17 40
J. F. Lewis, marshal, Virginia 4,382 29
J. H. Sloss, marshal, Alabama 1,936 14
J. Sherman, marshal, New Mexico 644 00
J. C. Ullery, marshal, Ohio. 422 37
7,402 20
Deduct repayments:
By J. H. Benedict 645 25
T. Boles 3,333 95
I. Q. Dickason 1,500 00
T. W. Hunt 787 16
J. L. Lake 100 00
6,366 36
1,035 84

Fees of supervisors of elections:		
To J. J. Allen		$9,461 86
N. P. Banks		2,380 00
A. Blythe		110 00
J. H. Bone		572 00
A. Curry		5 00
C. M. Dennison		5,246 49
E. W. Germain		5 00
W. M. Randolph		9 00
J. S. Rutan		10 00
D. Ruth		5 00
N. W. Trimble		460 77
J. G. Watts		85 00
P. Walter		159 30
		18,509 42
Deduct repayments:		
By N. P. Banks	15 00	
J. B. Erhardt	280 00	
J. M. McClintock	75 00	
W. J. Phillips	20 00	
J. S. Rutan	10 00	
		400 00
		18,109 42
Fees of jurors, United States courts, 1880:		
To M. C. Osborn, marshal, Alabama		300 00
Fees of jurors, United States courts, 1882:		
To A. Blythe, marshal, South Carolina		10 00
L. J. Hynes		9 00
J. F. Lewis, marshal, Virginia		86 40
A. B. Norton, marshal, Texas		452 40
D. Williams, marshal, New Jersey		12 00
H. R. Whiting		34 20
		604 00
Deduct repayments:		
By E. A. Ireland	275 50	
J. Longstreet	53 15	
M. C. Osborn	44 53	
J. B. Raymond	155 39	
		528 57
		75 43
Fees of jurors, United States courts, 1883:		
To G. W. Atkinson, marshal, West Virginia		9 25
T. Boles, marshal, Arkansas		259 00
N. P. Banks, marshal, Massachusetts		4 40
E. L. Bierbower, marshal, Nebraska		459 60
J. W. Chapman, marshal, Iowa		568 10
M. M. Drew, marshal, California		2,829 60
J. B. Erhardt, marshal, New York		2,926 00
C. Eustis		12 00
F. Fink, marshal, Wisconsin		1,999 10
C. Hopkins, marshal, Washington Territory		1,700 00
J. M. Hinds, marshal, Alabama		518 60
J. B. Hill, marshal, North Carolina		451 75
J. Kochler		16 40
J. B. Lewis		5 10
R. D. Locke, marshal, Georgia		874 68
J. A. McKee, marshal, Texas		26 00
A. L. Morrison, marshal, New Mexico		1,803 00
J. N. Patterson, marshal, New Hampshire		391 00
J. R. G. Pitkin, marshal, Louisiana		27 82
G. D. Perkins, marshal, Iowa		383 60
Carried forward		15,265 00

Fees of jurors, United States courts, 1883—Continued.		
Brought forward		$15,265 00
To W. C. Raum, marshal, Mississippi		50
P. Strobach, marshal, Alabama		1,981 25
J. W. Smith		6 00
J. C. Ullery, marshal, Ohio		163 40
L. Wright, marshal, Ohio		31 00
M. T. Williamson, marshal, Tennessee		381 00
N. D. Wallace		4 00
		17,832 15
Deduct from repayments:		
By C. C. Allen	345 45	
A. J. Auxier	4 15	
G. D. Bisbee	686 70	
A. C. Botkins	21 00	
N. P. Banks	474 90	
J. F. Coggeshall	369 10	
F. Coste	703 70	
P. S. Corbett	2,749 00	
H. R. Denny	1,292 65	
W. B. Deacon	1,172 70	
F. T. Du Bois	2,171 40	
M. M. Drew	668 00	
R. S. Foster	632 60	
H. Fink	680 70	
W. F. Goodspeed	582 25	
R. P. Hughes	1,843 50	
G. C. Herberlinger	814 70	
J. M. Hinds	1,464 20	
W. W. Henry	222 50	
C. Hopkins	1,679 95	
J. B. Hill	987 80	
E. A. Ireland	1,649 10	
A. M. Jones	207 40	
J. N. Kerns	242 10	
E. S. Kearney	1,123 10	
J. C. Kinney	180 80	
J. Longstreet	457 05	
H. H. McMullen	474 10	
J. H. McGee	41 95	
S. S. Matthews	376 80	
C. D. McDougall	319 60	
J. L. Morphis	179 20	
C. McMichael	3,424 00	
J. M. McClintock	995 70	
J. Monroe	2,700 80	
F. W. Oakley	1,067 30	
J. R. G. Pitkins	237 82	
J. N. Patterson	50	
G. D. Perkins	767 20	
W. J. Phillips	1,330 45	
D. B. Russell	488 50	
J. S. Rutan	244 40	
T. H. Reeves	158 15	
W. C. Raum	2,162 05	
C. Root	615 70	
W. A. Smith	2,051 20	
B. F. Simpson	353 60	
G. Shintzer	222 50	
A. C. Tate	952 00	
G. N. Tillman	498 60	
Z. L. Tidball	2,131 71	
J. C. Ullery	61 35	
J. Wheeler	114 40	
M. T. Williamson	90	
P. A. Williams	854 00	
J. C. Weaks	1,410 75	
L. Wright	3 60	
J. G. Watts	428 00	
		47,643 33
Excess of repayments		29,811 18
Fees of jurors, United States courts, 1884:		
To G. W. Atkinson, marshal, West Virginia		14,567 00
H. Allen, marshal, Dakota		12,600 00
Carried forward		27,167 00

1883–'84. JUDICIARY.

Fees of jurors, United States courts, 1884—Continued.		
Brought forward		$27,167 00
To A. J. Auxier, marshal, Kentucky		15,060 00
N. P. Banks, marshal, Massachusetts		8,500 00
T. Boles, marshal, Arkansas		18,500 00
G. D. Bisbee, marshal, Maine		3,360 00
A. C. Botkins, marshal, Montana		5,000 00
E. L. Beerbower, marshal, Nebraska		5,360 00
P. S. Corbett, marshal, Nevada		2,800 00
J. H. Coggeshall, marshal, Rhode Island		1,113 00
F. Coste, marshal, Missouri		6,600 00
W. B. Deacon, marshal, New Jersey		3,590 00
H. R. Denny, marshal, Minnesota		6,060 00
M. M. Drew, marshal, California		10,750 00
J. H. Durkee, marshal, Florida		3,500 00
F. T. Du Bois, marshal, Idaho		5,900 00
J. B. Erhardt, marshal, New York		11,000 00
R. S. Foster, marshal, Indiana		6,720 00
H. Fink, marshal, Wisconsin		4,500 00
H. L. Gosling, marshal, Texas		7,240 00
W. F. Goodspeed, marshal, Ohio		7,790 00
R. P. Hughes, marshal, Virginia		4,300 00
C. Hopkins, marshal, Washington		5,440 00
W. W. Henry, marshal, Vermont		1,356 00
J. M. Hinds, marshal, Alabama		4,000 00
J. B. Hill, marshal, North Carolina		3,205 00
E. A. Ireland, marshal, Utah		5,320 00
A. M. Jones, marshal, Illinois		9,060 00
J. C. Kinney, marshal, Connecticut		1,000 00
E. S. Kearney, marshal, Oregon		4,040 00
J. N. Kerns, marshal, Pennsylvania		8,780 00
T. B. Keogh, marshal, North Carolina		7,000 00
J. H. Livingston, marshal, South Carolina		12,748 00
R. D. Locke, marshal, Georgia		7,500 00
J. Longstreet, marshal, Georgia		9,000 00
J. L. Morphis, marshal, Mississippi		8,900 00
C. McMichael, marshal, District of Columbia		19,500 00
J. Munroe, marshal, Michigan		4,400 00
A. L. Morrison, marshal, New Mexico		12,080 00
C. D. MacDougall, marshal, New York		3,220 00
J. A. McKee, marshal, Texas		6,660 00
S. S. Matthews, marshal, Michigan		5,952 00
J. M. McClintock, marshal, Maryland		3,540 00
J. H. McGee, marshal, Missouri		10,200 00
H. H. McMullen, marshal, Delaware		1,527 00
F. W. Oakley, marshal, Wisconsin		3,450 00
Carried forward		322,688 00

Fees of jurors, United States courts, 1884—Continued.		
Brought forward		$322,688 00
To G. D. Perkins, marshal, Iowa		7,400 00
J. N. Patterson, marshal, New Hampshire		2,700 00
W. J. Phillips, marshal, Texas		4,500 00
J. R. G. Pitkin, marshal, Louisiana		6,500 00
R. Root, marshal, Iowa		8,700 00
T. H. Reeves, marshal, Tennessee		5,500 00
J. S. Rutan, marshal, Pennsylvania		15,545 00
D. B. Russell, marshal, Arkansas		5,250 00
W. C. Raum, marshal, Mississippi		4,000 00
G. Schnitzer, marshal, Wyoming		486 00
B. F. Simpson, marshal, Kansas		6,500 00
W. A. Smith, marshal, Colorado		8,500 00
P. Strobach, marshal- Alabama		4,900 00
A. C. Tate, marshal, New York		1,608 00
Z. L. Tidball, marshal, Arizona		8,400 00
G. N. Tillman, marshal, Tennessee		6,300 00
J. R. Tanner, marshal, Illinois		8,000 00
T. J. Tuomy, marshal, South Carolina		3,680 00
J. G. Tracey, marshal, Texas		1,000 00
J. C. Weaks, marshal, Louisiana		3,290 00
J. Wheeler, marshal, Illinois		4,000 00
M. T. Williamson, marshal, Tennessee		2,400 00
J. G. Watts, marshal, Virginia		6,255 00
L. Wright, marshal, Ohio		5,150 00
P. A. Williams, marshal, Florida		2,438 00
G. D. Williams, marshal, Maine		1,000 00
		456,690 00
Deduct repayments:		
By J. H. Durkee	$267 65	
W. F. Goodspeed	246 70	
C. Hopkins	1,700 00	
J. N. Kerns	1,564 80	
J. Longstreet	1,711 80	
J. H. McGee	310 20	
D. B. Russell	260 20	
T. H. Reeves	309 15	
J. R. Tanner	121 40	
J. Wheeler	210 35	
		6,702 25
		449,987 75
Fees of witnesses, United States courts, 1881 and prior years:		
By J. H. Durkee	$0 50	
J. M. Kerns	90	
M. C. Osborn	2 50	
P. P. Wilcox	148 25	
J. G. Watts	42 10	
	194 25	
Fees of witnesses, United States courts, 1882:		
To A. C. Botkins, marshal, Montana		29 00
R. T. Christain		2 85
H. R. Denny, marshal, Minnesota		81 60
J. B. Hill, marshal, North Carolina		1 50
Carried forward		114 95

Fees of witnesses, United States courts, 1882—Continued.

Brought forward		$114 95
To H. A. Jameson, marshal, Virginia		9 70
W. Letcher		21 60
J. F. Lewis, marshal, Virginia.		569 80
W. C. Raum, marshal, Mississippi		51 45
J. H. Sloss, marshal, Alabama.		587 01
C. W. Silver		20 20
W. Wattigny		4 50
R. J. Woolwine, marshal, Virginia		20 40
J. G. Watts, marshal, Virginia		27 40
		1,427 01
Deduct from repayments:		
By G. W. Atkinson	$10 70	
A. Blythe	120 00	
A. C. Botkins	5 26	
J. W. Chapman	49 90	
M. M. Drew	303 20	
E. F. Hupperty	1,441 37	
E. A. Ireland	104 20	
J. Longstreet	594 40	
A. B. Norton	554 21	
W. A. Smith	2 40	
J. C. Ullery	98 65	
J. C. Weaks	3 00	
P. P. Wilcox	937 65	
J. G. Watts	4 10	
		4,229 04
Excess of repayments		2,802 03

Fees of witnesses, United States courts, 1883:

To G. W. Atkinson, marshal, West Virginia		163 01
A. J. Auxier, marshal, Kentucky		2,461 75
W. G. Bitten		3 00
T. Boles, marshal, Arkansas		2,200 00
N. P. Banks, marshal, Massachusetts		1,957 35
S. B. Benson		27 20
J. D. Carter		18 30
H. R. Denny, marshal, Minnesota		1,381 03
F. M. Doty		6 30
L. Doty		4 80
Nancy Doty		2 40
P. V. Doty		4 80
J. E. Doty		6 30
H. Fink, marshal, Wisconsin.		53 00
D. C. Greenfield		19 30
P. Garner		3 10
B. Hodge		3 10
C. Hopkins, marshal, Washington		200 00
R. P. Hughes, marshal, Virginia		1,202 50
J. M. Hinds, marshal, Alabama		7,169 80
J. B. Hill, marshal, North Carolina		2,324 07
T. B. Keogh, marshal, North Carolina		1,300 00
J. N. Kerns, marshal, Pennsylvania		156 89
J. C. Kinney, marshal, Connecticut		14 40
J. Longstreet, marshal, Georgia		3,862 95
R. D. Locke, marshal, Georgia.		2,039 50
J. A. McKee, marshal, Texas.		603 00
A. L. Morrison, marshal, New Mexico		644 00
C. McMichael, marshal, District of Columbia		1,863 67
Michigan Central R. R. Co.		14 25
F. McCurdy		2 80
Carried forward		29,712 57

Fees of witnesses, United States courts, 1883—Continued.

Brought forward		$29,712 57
To E. K. Ousley		8 50
W. J. Phillips, marshal, Texas.		18 70
G. D. Perkins, marshal, Iowa.		1,080 25
P. A. Potticher		1 50
J. M. Robinson		9 90
R. K. Reeves		16 50
W. A. Reid		162 55
T. H. Reeves, marshal, Tennessee		700 00
P. Strobach, marshal, Alabama		2,018 00
B. F. Simpson, marshal, Kansas		3,733 19
J. H. Shear		1 50
D. Stroup		1 50
E. Turner		14 00
G. N. Tillman, marshal, Tennessee		9 70
J. C. Ullery, marshal, Ohio		55
Vaile, Miner & Co		15 00
E. S. Wheat, marshal, Tennessee		18 30
M. T. Williamson, marshal, Tennessee		172 00
J. G. Watts, marshal, Virginia		2,064 32
R. J. Woolwine, marshal, Virginia		4 30
War Department		4 00
		39,766 83
Deduct from repayments:		
By C. C. Allen	$570 55	
G. D. Bisbee	294 40	
A. C. Botkins	173 40	
E. L. Bierbower	1,759 30	
N. P. Banks	2,523 36	
A. Blythe	160 40	
T. Boles	228 67	
J. W. Chapman	244 55	
J. H. Coggeshall	234 60	
F. Coste	2,049 15	
P. S. Corbett	750 00	
M. M. Drew	720 70	
F. R. Denny	2 34	
W. B. Deacon	48 30	
F. T. DuBois	1,078 70	
J. S. Durkee	369 45	
J. B. Erhardt	1,245 19	
R. S. Foster	410 06	
W. F. Goodspeed	1,606 23	
R. P. Hughes	617 85	
G. C. Herberling	561 05	
W. W. Henry	87 10	
C. Hopkins	229 28	
J. M. Hinds	4,169 80	
J. B. Hill	1,056 35	
J. A. Haskins	66 00	
E. A. Ireland	568 60	
A. M. Jones	224 20	
E. S. Kearney	945 45	
J. C. Kinney	24 54	
J. Longstreet	2,920 24	
C. McMichael	5,252 08	
F. H. McMullen	183 60	
J. H. McGee	199 80	
S. S. Matthews	65	
C. D. McDougall	186 43	
J. L. Morphis	94 45	
J. M. McClintock	570 25	
J. Monroe	93 71	
J. A. McKee	40 18	
F. W. Oakley	534 70	
J. N. Patterson	180 30	
J. R. G. Pitkins	496 75	
W. J. Phillips	1,633 00	
D. B. Russell	128 76	
J. S. Rutan	179 01	
R. Root	691 70	
W. C. Raum	460 00	
T. H. Reeves	21 20	
Carried forward	36,886 38	39,766 83

Fees of witnesses, United States courts, 1883—Continued.		
Deduct repayments:		
Brought forward	$36,886 38	$39,766 83
By E. T. Roe	13 80	
P. Strobach	1,145 65	
W. A. Smith	692 60	
B. F. Simpson	50 20	
J. H. Sloss	211 80	
G. Schuetzer	357 55	
Z. L. Tidball	4,388 55	
A. C. Tate	453 50	
M. T. Williamson	45	
P. A. Williams	133 40	
J. G. Watts	254 16	
J. C. Weaks	2,348 85	
L. Wright	418 30	
		47,355 19
Excess of repayments		7,588 36
Fees of witnesses, United States courts, 1884:		
To G. W. Atkinson, marshal, West Virginia		$25,500 00
H. Allen, marshal, Dakota		28,716 00
A. J. Auxier, marshal, Kentucky		21,500 00
J. N. Allison		17 40
N. P. Banks, marshal, Massachusetts		9,000 00
T. Boles, marshal, Arkansas		44,500 00
G. D. Bisbee, marshal, Maine		4,630 00
E. L. Bierbower, marshal, Nebraska		2,875 00
A. C. Botkins, marshal, Montana		3,600 00
P. S. Corbett, marshal, Nevada		750 00
F. Coste, marshal, Missouri		4,000 00
J. H. Coggeshall, marshal, Rhode Island		270 00
W. B. Deacon, marshal, New Jersey		3,350 00
M. M. Drew, marshal, California		11,500 00
H. R. Denny, marshal, Minnesota		9,000 00
J. H. Durkee, marshal, Florida		6,350 00
F. T. Du Bois, marshal, Idaho		2,525 00
J. B. Erhardt, marshal, New York		6,000 00
G. B. Emory		41 00
R. S. Foster, marshal, Indiana		5,450 00
H. Fink, marshal, Wisconsin		1,775 00
W. F. Goodspeed, marshal, Ohio		3,000 00
H. L. Gosling, marshal, Texas		7,460 00
W. Gray		29 50
J. M. Hinds, marshal, Alabama		21,000 00
J. B. Hill, marshal, North Carolina		2,400 00
R. P. Hughes, marshal, Virginia		4,120 00
C. Hopkins, marshal, Washington Territory		1,700 00
W. W. Henry, marshal, Vermont		969 00
E. A. Ireland, marshal, Utah		1,800 00
A. M. Jones, marshal, Illinois		4,350 00
J. C. Kinney, marshal, Connecticut		1,300 00
J. N. Kerns, marshal, Pennsylvania		5,340 00
E. S. Kearney, marshal, Oregon		7,100 00
T. B. Keogh, marshal, North Carolina		13,770 00
R. D. Locke, marshal, Georgia		9,500 00
Carried forward		275,187 90

Fees of witnesses, United States courts, 1884—Continued.		
Brought forward		$275,187 90
To J. Longstreet, marshal, Georgia		25,000 00
J. H. Livingston, marshal, South Carolina		44,700 00
J. H. McGee, marshal, Missouri		16,400 00
J. L. Morphis, marshal, Mississippi		4,000 00
C. McMichael, marshal, District of Columbia		8,500 00
A. L. Morrison, marshal, New Mexico		5,700 00
J. A. McKee, marshal, Texas		7,550 00
C. D. McDougall, marshal, New York		20,250 00
S. S. Matthews, marshal, Michigan		1,750 00
J. Monroe, marshal, Michigan		2,200 00
H. H. McMullen, marshal, Delaware		650 00
J. M. McClintock, marshal, Maryland		3,300 00
J. McGloue		141 25
Northern Pacific R. R. Co		20 50
F. W. Oakley, marshal, Wisconsin		3,300 00
G. D. Perkins, marshal, Iowa		8,200 00
J. R. G. Pitkins, marshal, Louisiana		1,675 00
J. N. Patterson, marshal, New Hampshire		900 00
W. J. Phillips, marshal, Texas		4,500 00
Pullman Palace Car Company		1 00
R. Root, marshal, Iowa		8,500 00
D. B. Russell, marshal, Arkansas		9,250 00
T. H. Reeves, marshal, Tennessee		18,000 00
J. S. Rutan, marshal, Pennsylvania		10,757 00
W. C. Raum, marshal, Mississippi		2,600 00
W. A. Smith, marshal, Colorado		10,500 00
P. Strobach, marshal, Alabama		16,500 00
G. Schuetzer, marshal, Wyoming		1,500 00
B. F. Simpson, marshal, Kansas		18,630 00
E. L. Smith		29 50
A. C. Tate, marshal, New York		780 00
G. N. Tillman, marshal, Tennessee		20,500 00
Z. L. Tidball, marshal, Arizona		9,100 00
J. R. Tanner, marshal, Illinois		15,000 00
T. J. Tuomy, marshal, South Carolina		6,000 00
J. G. Tracey, marshal, Texas		1,000 00
J. M. Vale		42 50
J. C. Weaks, marshal, Louisiana		3,050 00
J. Wheeler, marshal, Illinois		9,000 00
M. T. Williamson, marshal, Tennessee		1,700 00
L. Wright, marshal, Ohio		3,100 00
P. A. Williams, marshal, Florida		980 00
J. G. Watts, marshal, Virginia		9,155 00
		609,599 65
Deduct repayments:		
By W. B. Deacon	$9 85	
J. H. Durkee	294 95	
W. F. Goodspeed	667 60	
Carried forward	972 40	609,599 65

Fees of witnesses, United States courts, 1884—Continued.		
Deduct repayments:		
Brought forward.	$972 40	$609,599 65
By C. Hopkins	200 00	
J. N. Kerns	775 88	
J. Longstreet	2,579 25	
J. H. McGee	3,079 98	
D. B. Russell	1,315 57	
J. R. Tanner	142 90	
J. Wheeler	808 35	
		9,874 33
		599,725 32
Support of prisoners United States courts, 1881 and prior:		
By N. P. Banks	$82 66	
T. B. Keogh	239 70	
M. C. Osborn	300 04	
P. P. Wilcox	588 00	
J. G. Watts	456 60	
		1,697 00
Support of prisoners United States courts, 1882:		
To G. W. Anderson, marshal, West Virginia		11 00
J. N. Adkins		100 00
N. Anderson, marshal, Georgia		2 70
Arkansas Penitentiary		146 75
C. F. Benham		161 45
H. A. Carper		4 55
V. Dell, marshal, Arkansas		855 37
F. T. Dubois, marshal, Idaho		1,164 19
Erie County Penitentiary, New York		138 44
J. Gallamore		2 90
J. W. Harris		24 15
R. P. Hughes, marshal, Virginia		50
Kentucky Penitentiary		146 20
J. F. Lewis, marshal, Virginia		27 71
J. M. Lyle		32 00
Managers New York House of Refuge		34 00
R. H. Nicholas		263 85
Penitentiary, Munroe County, New York		73 00
Penitentiary, Albany, N. Y.		404 02
J. S. Rutan, marshal, Pennsylvania		285 00
W. C. Raum, marshal, Mississippi		4 00
J. W. Switzer		24 15
G. N. Tillman, marshal, Tennessee		84 20
H. R. Watt, marshal, Kansas		37 20
J. C. Weaks, marshal, Louisiana		68 00
J. G. Watts, marshal, Virginia		359 55
		4,454 88
Deduct repayments:		
By J. W. Chapman	$54 17	
E. F. Hupperty	331 44	
C. Hopkins	1,231 84	
T. B. Keogh	719 35	
J. Longstreet	301 51	
A. B. Norton	751 35	
J. C. Ullery	34 65	
		3,424 31
		1,030 57
Support of prisoners United States courts, 1883:		
To Auburn Prison, New York		25 00
A. J. Auxcer, marshal, Kentucky		985 00
Carried forward		1,010 00

Support of prisoners United States courts, 1883—Continued.	
Brought forward	$1,010 00
To G. W. Atkinson, marshal, West Virginia	514 00
W. Anderson	11 00
Arkansas Penitentiary	8 50
H. Brahan	40 00
Board of prison commissioners, Arizona	973 37
J. Barton	29 50
A. Blythe, marshal, South Carolina	160 40
N. P. Banks, marshal, Massachusetts	941 70
M. C. Bulbridge	6 00
A. C. Botkins, marshal, Montana	281 53
J. D. Carter	4 50
Connecticut State Prison	195 10
Cleveland House of Correction	84 00
California State Prison	735 00
Clinton Prison, New York	17 00
Detroit House of Correction	440 00
F. T. Dubois, marshal, Idaho	610 00
A. Douglass	19 60
H. R. Denny, marshal, Minnesota	6 75
W. B. Deacon, marshal, New Jersey	111 37
T. B. Eames	5 66
Erie County Penitentiary, New York	523 50
G. W. Earle	22 50
Essex County Penitentiary, New Jersey	19 00
Eastern State Penitentiary of Pennsylvania	1,247 15
F. M. Ferrel	4 00
G. C. Heberling, marshal, Iowa	150 00
C. Hopkins, marshal, Washington Territory	3,361 00
J. M. Hinds, marshal, Alabama	558 83
House of Correction, Northern Illinois	21 35
House of Correction, Chicago,	83 30
House of Correction, Rutland, Vt	338 31
J. B. Hill, marshal, North Carolina	119 40
Illinois State Penitentiary	614 20
Iowa State Penitentiary	247 24
Illinois House of Correction	70 70
E. S. Kearney, marshal, Oregon	210 00
Kentucky Penitentiary	3 00
Kansas State Penitentiary	474 50
J. Longstreet, marshal, Georgia	5,709 05
J. H. Livingston, marshal, South Carolina	2,300 00
J. H. McGee, marshal, Missouri	253 67
Managers New York House of Refuge	144 77
Milwaukee House of Correction	43 21
Maine State Prison	136 50
Maryland House of Correction	237 40
J. M. McClintock, marshal, Maryland	58 60
A. L. Morrison, marshal, New Mexico	1,000 00
Maryland House of Reformation	351 00
Maryland House of Refuge	475 50
Massachusetts State Prison	390 00
Maryland Penitentiary	113 96
Minnesota State Prison	109 00
Michigan State Prison	68 25
New Hampshire State Prison	63 70
New Jersey State Prison	445 00
Carried forward	26,172 57

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Support of prisoners United States courts, 1883—Continued.		
Brought forward	$26,172 57	
To New York Reformatory, Elmira	190 50	
Nebraska State Penitentiary	45 50	
New Jersey State Reform School	45 00	
Ohio Penitentiary	96 80	
Oregon Penitentiary	375 00	
Onondaga County Penitentiary, New York	42 85	
Penitentiary, Monroe County, New York	384 00	
Penitentiary, Albany County, New York	1,378 00	
J. R. G. Pitkins, marshal, Louisiana	124 55	
G. D. Perkins, marshal, Iowa	436 75	
J. N. Patterson, marshal, New Hampshire	1 05	
Rhode Island State Prison	39 00	
T. H. Reeves, marshal, Tennessee	411 91	
D. B. Russell, marshal, Arkansas	533 00	
G. W. Standifer	10 16	
Southern Illinois Penitentiary	858 00	
State of Indiana	101 00	
W. D. Scheifer	12 60	
P. Strobach, marshal, Alabama	431 91	
Saint Louis House of Refuge	40 80	
Z. L. Tidball, marshal, Arizona	612 50	
J. J. & W. H. Tobin	5 85	
Texas State Penitentiary	270 00	
West Virginia Penitentiary	146 00	
Wisconsin State Prison	48 25	
J. G. Watts, marshal, Virginia	254 16	
I. C. & J. C. Walker	4 50	
		33,072 21
Deduct repayments:		
By A. J. Auxcer	$278 05	
C. C. Allen	374 05	
A. C. Botkins	1,408 40	
E. L. Bierbower	81 40	
N. P. Banks	992 63	
T. Boles	1,224 67	
G. D. Bisbee	265 57	
J. W. Chapman	203 97	
J. H. Coggeshall	82 71	
F. Coste	217 80	
P. S. Corbett	250 00	
J. S. Durkee	89 60	
W. B. Deacon	230 79	
H. R. Denny	234 44	
F. T. Dubois	1,166 19	
M. M. Drew	758 25	
J. B. Erhardt	427 79	
R. S. Foster	37 02	
H. Fink	11 81	
W. F. Goodspeed	66 70	
J. B. Hill	300 65	
W. W. Henry	400 00	
R. P. Hughes	123 80	
G. C. Heberling	73 50	
J. M. Hinds	571 58	
C. Hopkins	44 47	
A. M. Jones	367 12	
E. S. Kearney	70	
J. N. Kerns	87 70	
J. C. Kinney	167 38	
T. B. Keogh	210 66	
R. D. Locke	408 85	
J. Longstreet	1,361 05	
J. McClintock	43 30	
J. D. Morphis	93 45	
S. S. Matthews	242 34	
J. Monroe	292 06	
J. A. McKee	178 30	
C. D. MacDougal	394 25	
F. W. Oakley	73 00	
Carried forward	13,836 00	33,072 21

Support of prisoners United States courts, 1883—Continued.		
Deduct repayments:		
Brought forward	$13,836 00	$33,072 21
By G. D. Perkins	348 75	
W. J. Phillips	226 05	
J. N. Patterson	131 79	
J. R. G. Pitkins	262 30	
J. S. Rutan	481 95	
W. C. Raum	450 65	
D. B. Russell	119 25	
R. Root	446 63	
A. N. Stickney	313 60	
W. A. Smith	92 40	
B. F. Simpson	182 95	
C. Schnitzer	97 52	
P. Strobach	45 67	
Z. L. Tidball	700 00	
A. C. Tate	215 35	
G. N. Tillman	93 90	
J. G. Watts	1,939 21	
E. S. Wheat	451 66	
M. T. Williamson	300 70	
P. A. Williams	165 20	
L. Wright	33 25	
J. C. Weaks	200 15	
		21,134 93
		11,937 28
Support of prisoners United States courts, 1884:		
To G. W. Atkinson, marshal, West Virginia		3,396 00
H. Allen, marshal, Dakota		4,500 00
A. J. Auxier, marshal, Kentucky		7,000 00
Auburn Prison, New York		360 21
N. P. Banks, marshal, Massachusetts		3,500 00
Board of Prison Commissioners, Arizona		804 37
T. Boles, marshal, Arkansas		15,500 00
G. D. Bisbee, marshal, Maine		925 00
A. C. Botkins, marshal, Montana		7,300 00
E. L. Bierbower, marshal, Nebraska		700 00
P. S. Corbett, marshal, Nevada		250 00
F. Coste, marshal, Missouri		1,900 00
J. H Coggeshall, marshal, Rhode Island		115 00
Connecticut State Prison		578 34
Clinton Prison, New York		26 40
Cleveland House of Correction		148 76
California State Prison		2,033 50
W. B. Deacon, marshal, New Jersey		700 00
H. K. Denny, marshal, Minnesota		800 00
M. M. Drew, marshal, California		4,200 00
J. H. Durkee, marshal, Florida		730 00
F. T. Du Bois, marshal, Idaho		3,242 00
Detroit House of Correction		1,920 00
J. M. Ewing, disbursing clerk		37,425 30
J. B. Erhardt, marshal, New York		4,200 00
Essex County Penitentiary, New Jersey		11 00
Eastern Penitentiary, Pennsylvania		4,033 80
Erie County Penitentiary, New York		510 00
R. S. Foster, marshal, Indiana		2,100 00
F. Fink, marshal, Wisconsin		600 00
W. F. Goodspeed, marshal, Ohio		900 00
H. L. Gosling, marshal, Texas		3,700 00
R. P. Hughes, marshal, Virginia		750 00
C. Hopkins, marshal, Washington Territory		11,254 00
Carried forward		126,113 68

Support of prisoners United States courts, 1884—Continued.	
Brought forward	$126,113 68
To J. M. Hinds, marshal, Alabama	1,110 00
W. W. Henry, marshal, Vermont	400 00
J. B. Hill, marshal, North Carolina	245 00
House of Correction, Northern Illinois	56 35
House of Correction, Rutland, Vermont	280 65
Illinois State Penitentiary	420 20
E. A. Ireland, marshal, Utah	400 00
Iowa State Penitentiary	212 82
Indiana Reformatory Institution	58 40
A. M. Jones, marshal, Illinois	1,500 00
E. S. Kearney, marshal, Oregon	1,897 00
Kansas State Penitentiary	1,229 00
T. B. Keogh, marshal, North Carolina	6,000 00
J. N. Kerns, marshal, Pennsylvania	1,190 00
J. C. Kenney, marshal, Connecticut	300 00
R. D. Locke, marshal, Georgia	1,500 00
J. H. Livingston, marshal, South Carolina	2,800 00
J. Longstreet, marshal, Georgia	6,500 00
J. H. McGee, marshal, Missouri	3,900 00
J. L. Morphis, marshal, Mississippi	500 00
A. L. Morrison, marshal, New Mexico	1,500 00
J. A. McKee, marshal, Texas	1,795 00
S. S. Matthews, marshal, Michigan	580 00
J. Monroe, marshal, Michigan	600 00
J. M. McClintock, marshal, Maryland	1,332 00
C. D. MacDougall, marshal, New York	2,200 00
Maryland House of Correction	381 00
Michigan State Prison	24 00
Milwaukee House of Correction	224 26
Maine State Prison	403 75
Massachusetts State Prison	130 00
Minnesota State Prison	471 50
Maryland Penitentiary	220 52
Maryland House of Refuge	1,101 00
H. H. McMullen, marshal, Delaware	450 00
C. McMichael, marshal, District of Columbia	10,000 00
Missouri House of Refuge	41 40
Nebraska Penitentiary	92 00
New Hampshire State Prison	191 80
New Jersey State Prison	1,430 75
New Jersey State Reform School	17 00
Nevada State Prison	167 00
New York State Reformatory	347 26
Nebraska State Prison	45 50
F. W. Oakley, marshal, Wisconsin	400 00
Ohio Penitentiary	59 20
Oregon State Prison	1,664 55
Onondaga County Penitentiary, New York	28 75
G. D. Perkins, marshal, Iowa	1,700 00
J. R. G. Pitkins, marshal, Louisiana	1,200 00
J. N. Patterson, marshal, New Hampshire	400 00
W. J. Phillips, marshal, Texas	550 00
Carried forward	186,361 34

Support of prisoners United States courts, 1184—Continued.	
Brought forward	$186,361 34
To Penitentiary, Monroe County, New York	52 79
Penitentiary, Albany, N. Y.	555 00
R. Root, marshal, Iowa	800 00
D. B. Russell, marshal, Arkansas	2,000 00
T. H. Reeves, marshal, Tennessee	2,750 00
J. S. Rutan, marshal, Pennsylvania	1,900 00
W. C. Raum, marshal, Mississippi	650 00
Rhode Island State Prison	117 86
W. A. Smith, marshal, Colorado	2,480 00
Saint Louis House of Refuge	89 60
P. Strobach, marshal, Alabama	1,150 00
G. Schnitzer, marshal, Wyoming	7,114 00
B. F. Simpson, marshal, Kansas	2,500 00
State of Indiana	535 75
State of Missouri	244 85
Southern Illinois Penitentiary	155 00
W. D. Scheifer	1 00
J. H. Speed, marshal, Alabama	350 00
G. N. Tillman, marshal, Tennessee	2,800 00
A. C. Tate, marshal, New York	560 00
Z. L. Tidball, marshal, Arizona	4,500 00
Texas State Penitentiary	5 00
J. R. Tanner, marshal, Illinois	2,750 00
T. J. Tuomy, marshal, South Carolina	4,500 00
J. G. Tracey, marshal, Texas	250 00
Vermont State Prison	13 50
J. C. Weaks, marshal, Louisiana	629 00
J. Wheeler, marshal, Illinois	1,000 00
M. T. Williamson, marshal, Tennessee	800 00
L. Wright, marshal, Ohio	1,700 00
P. A. Williams, marshal, Florida	290 00
J. G. Watts, marshal, Virginia	2,100 00
West Virginia Penitentiary	372 25
Wisconsin State Prison	178 75
	232,255 69
Deduct repayments:	
By J. H. Durkee	$235 40
W. F. Goodspeed	299 80
C. Hopkins	2,614 00
J. N. Kerns	51 80
E. S. Kearney	2 23
J. Longstreet	1,695 25
C. F. Moore	352 25
J. Monroe	4 85
J. H. McGee	9 15
D. B. Russell	729 50
A. N. Stickney	268 80
J. R. Tanner	278 00
	6,541 03
	225,714 66
Miscellaneous expenses, United States courts, 1880:	
To C. Hopkins, Washington Territory	4 00
M. C. Osborn, Alabama	153 91
	157 91

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Miscellaneous expenses, United States courts, 1881 and prior:		
By G. W. Atkinson	$2 35	
A. L. Hutchinson..	17 40	
J. G. Watts.....	57 50	
	77 25	
Miscellaneous expenses, United States courts, 1882:,		
To G. W. Atkinson, marshal, West Virginia	54 60	
E. Broughton & Co	20 00	
Commercial Publishing Company, Kentucky.....	224 63	
V. Dell, marshal, Arkansas..	337 00	
H. R. Denny, marshal, Minnesota	127 45	
J. H. Durkee, marshal, Florida	101 21	
M. M. Drew, marshal, California	303 20	
F. A. Daingerfield	40 00	
F. T. Dubois, marshal, Idaho.	10 75	
J. M. Ewing, disbursing clerk	62 25	
Estate of Jabez W. Fitch....	20 00	
C. Haughan, late judge	4 00	
J. B. Hill, marshal, North Carolina	8 00	
E. A. Ireland, marshal, Utah.	808 15	
A. O. Kellogg	425 00	
Leroux & Cosgrove	20 75	
J. F. Moore	10 00	
S. S. Matthews, Michigan	19 50	
J. N. Nelson	10 00	
P. H. Snook, marshal, Georgia	38 50	
A. T. Sumney.....	15 00	
P. P. Wilcox, marshal, Colorado.....	10 00	
Walker, Evans & Cogswell ..	16 50	
H. R. Whiting	45 00	
	2,731 49	
Deduct repayments:		
By R. H. Crittenden...	$7 73	
E. F. Hupperty	230 99	
J. N. Kerns.....	19 12	
J. Longstreet	967 51	
C. D. MacDongall..	6 00	
M. C. Osborn	47 87	
J. H. Sloss	41 50	
Treasury Department.....	50	
J. C. Ullery.....	163 10	
J. C. Weaks	87 65	
	1,571 97	
	1,159 52	
Miscellaneous expenses United States courts, 1883:		
To G. W. Atkinson, marshal, West Virginia	96 00	
C. Callen, marshal, Nevada ..	16 00	
T. Boles, marshal, Arkansas.	1,000 00	
N. P. Banks, marshal, Massachusetts.....	737 57	
J. A. Beamer	2 25	
W. H. Bliss, attorney, Missouri	343 09	
Brower Brothers.....	291 54	
J. S. Babcock.....	48 80	
P. Crichard	6 40	
J. W. Chapman, marshal, Iowa	625 46	
A. F. Coolidge.....	36 51	
W. A. Callaway.....	1 60	
C. H. Cotton & Co	21 05	
H. C. Cabell.....	140 00	
T. A. Collins.....	25 00	
H. R. DuPont.....	90 00	
J. B. Drake & Co.....	72 00	
F. A. Daingerfield.....	40 00	
Estate of Jabez W. Fitch	20 00	
Carried forward..... ...	3,613 27	

Miscellaneous expenses United States, 1884—Continued.	
Brought forward.....	$3,613 27
To Grosvenor & Harger.....	96 75
Howell & Burkam	7 50
W. W. Henry, marshal, Vermont	180 00
C. Hopkins, marshal, Washington Territory.....	1,031 64
C. Haughn.....	7 05
R. P. Hughes, marshal, Virginia.....	139 30
W. C. Hicks	562 50
E. J. Hubbard	581 50
J. M. Hurds, marshal, Alabama.....	16 90
J. B. Hill, marshal, North Carolina.....	352 75
E. A. Ireland, marshal, Utah.	2,627 48
E. S. Kearney, marshal, Oregon	210 00
O. W. Long	42 00
J. Longstreet, marshal, Georgia	139 00
J. F. Moore.....	60 00
G. Morris	42 00
J. A. McKee, marshal, Texas.	150 00
A. Moog	504 00
R. H. Moulton	26 00
H. H. McMullen, marshal, Delaware	4 54
J. H. McGee, marshal, Missouri	25 33
A. L. Morrison, marshal, New Mexico.....	263 20
J. M. McClintock, marshal, Maryland	183 06
C. H. Myers.....	22 40
McBride & Co.....	18 00
Mrs. M. A. Marchant.....	140 00
J. N. Nelson	10 00
National Hotel, Washington, D. C.....	147 00
Oregon State Penitentiary ...	43 20
A. Pinkerton	2,496 55
J. C. Parker	12 95
M. F. Pleasants, marshal, Virginia	80 00
D. R. Poineer, marshal, New York.....	21 20
G. D. Perkins, marshal, Iowa.	209 20
R. L. Rossan	25 00
R. Root, marshal, Iowa	73 05
N. S. O. Robinson.....	16 25
E. Root, marshal, New York..	33 51
T. H. Reeves, marshal, Tennessee.....	350 00
P. Strobach, marshal, Alabama	699 83
J. B. Sheridan	63 75
W. A. Smith, marshal, Colorado.....	88 00
J. Smith.....	20 00
W. W. Shaw	31 20
W. A. Spencer	80 30
A. T. Sumney	10 00
W. B. Tunsell	8 00
Z. L. Tidball, marshal, Arizona	1,081 15
A. C. Tate, marshal, New York.....	200 00
G. N. Tillman, marshal, Tennessee.....	450 00
J. C. Ullery, marshal, Ohio...	419 26
J. J. H. Van Bokkelin	24 82
J. G. Watts, marshal, Virginia	485 50
L. Wright, marshal, Ohio	300 00
C. C. Waters, marshal, Arkansas.....	37 75
W. B. Whitney	28 00
S. T. Westcott.....	28 00
H. P. Warner.....	15 00
J. A. Walsh.....	250 00
Carried forward.....	18,884 64

Miscellaneous expenses, United States courts, 1884—Continued.

Brought forward		$18,884 64
Deduct repayments:		
By A. J. Auxier	$522 10	
C. C. Allen	173 86	
E. L. Bierbower	49 90	
G. D. Bisbee	184 02	
A. C. Botkins	202 30	
T. Boles	1,636 89	
N. P. Banks	440 10	
J. H. Coggeshall	158 78	
F. Coste	263 75	
P. S. Corbett	65 47	
M. M. Drew	510 55	
W. B. Deacon	08	
F. T. Dubois	377 05	
H. R. Denny	102 20	
J. B. Erhardt	945 90	
R. S. Foster	200 45	
H. Fink	100 11	
W. F. Goodspeed	155 17	
G. C. Heberling	52 00	
J. M. Hinds	101 33	
W. W. Henry	60 39	
J. B. Hill	653 18	
E. S. Kearney	275 36	
J. N. Kerns	403 77	
T. B. Keogh	33 38	
J. C. Kinney	27 82	
J. Longstreet	226 59	
R. D. Locke	1 54	
J. L. Morphis	75 32	
S. S. Matthews	46 60	
C. D. MacDougall	60 88	
C. McMichael	136 74	
J. Monroe	299 34	
J. G. Nicolay	491 05	
F. W. Oakley	17 35	
J. R. G. Pitkins	320 96	
W. J. Phillips	193 60	
J. N. Patterson	84 82	
G. D. Perkins	468 65	
D. B. Russell	129 67	
W. C. Raum	137 15	
J. S. Rutan	162 04	
T. H. Reeves	433 15	
B. F. Simpson	46 85	
W. A. Smith	20 33	
G. Schnitzer	38 90	
P. Strobach	53 95	
A. C. Tate	6 77	
Z. L. Tidball	100 00	
J. C. Ullery	149 07	
J. G. Watts	640 22	
M. T. Williamson	20 56	
P. A. Williams	94 30	
J. C. Weaks	921 96	
		13,074 27
		5,810 37

Miscellaneous expenses United States courts, 1884:

To G. W. Atkinson, marshal, West Virginia	5,888 00
H. Allen, marshal, Dakota	3,248 00
A. J. Auxur, marshal, Kentucky	1,330 00
J. F. Allen	50 00
N. P. Banks, marshal, Massachusetts	8,700 00
T. Boles, marshal, Arkansas	9,600 00
G. D. Bisbee, marshal, Maine	2,500 00
E. L. Bierbower, marshal, Nebraska	2,225 00
A. C. Botkins, marshal, Montana	2,200 00
W. H. Bliss, attorney, Missouri	415 61
J. W. Beck	5 00
C. Bennett	1,131 45
H. F. Bocock	6 00
Carried forward	37,299 06

Miscellaneous expenses, United States courts, 1884—Continued.

Brought forward	$37,299 06
To F. Coste, marshal, Missouri	4,800 00
P. S. Corbett, marshal, Nevada	765 00
J. H. Coggeshall, marshal, Rhode Island	2,750 00
H. J. Campbell	6 00
A. F. Cooledge	793 48
T. H. Cann	8 95
I. N. Cardozo	9 50
Clephane & Co	184 12
R. B. Carpenter	67 50
W. F. Carmon	15 00
W. B. Deacon, marshal, New Jersey	2,400 00
H. R. Denny, marshal, Minnesota	1,410 00
F. T. Dubois, marshal, Idaho	1,900 00
L. W. Dollarhide	3 80
M. M. Drew, marshal, California	9,080 00
W. S. Decker	156 90
J. H. Durkee, marshal, Florida	2,476 00
Denver and Rio Grande R. R. Co	2 50
F. A. Daingerfield	40 00
H. C. Denming	330 00
Evening Post job printing office	31 50
J. M. Ewing, disbursing clerk	11,000 00
J. B. Erhardt, marshal, New York	20,000 00
W. Elmer	4 88
E. D. Easton	113 40
R. S. Foster, marshal, Indiana	2,890 00
H. Fink, marshal, Wisconsin	1,730 00
J. L. Fowler	37 00
J. H. Fish	119 40
T. B. Faulk	13 75
Jabez W. Fitch estate	20 00
W. F. Goodspeed, marshal, Ohio	4,095 00
H. L. Gosling, marshal, Texas	2,760 00
E. C. Gilbreath	41 60
J. M. Hinds, marshal, Alabama	1,280 00
R. P. Hughes, marshal, Virginia	4,600 00
C. Hopkins, marshal, Washington Territory	2,595 00
W. W. Henry, marshal, Vermont	770 00
J. B. Hill, marshal, North Carolina	1,034 00
F. H. Hathaway	69 45
W. C. Hicks	575 00
E. J. Hubbard	211 90
E. A. Ireland, marshal, Utah	445 00
A. M. Jones, marshal, Illinois	5,574 00
J. K. Jackson	82 05
J. C. Kinney, marshal, Connecticut	425 00
J. N. Kerns, marshal, Pennsylvania	5,304 00
E. S. Kearney, marshal, Oregon	4,591 00
T. B. Keogh, marshal, North Carolina	1,785 00
Kansas Pacific R. R. Co	27 74
W. W. Ker	400 42
R. D. Locke, marshal, Georgia	3,900 00
J. Longstreet, marshal, Georgia	3,500 00
J. J. Linney	12 00
J. H. Livingston, marshal, South Carolina	5,064 00
A. G. C. Lee	45 25
J. Lee	50 00
G. M. Lambertson	39 00
A. H. Leonard	25 00
A. Lash	150 00
Carried forward	149,909 15

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Miscellaneous expenses, United States courts, 1884—Continued.		
Brought forward		$149,909 15
To J. L. Morphis, marshal, Mississippi		2,330 00
R. B. Murray		14 00
C. H. Myers		64 80
J. H. McGee, marshal, Missouri		4,255 00
C. McMichael, marshal, District of Columbia		23,000 00
A. L. Morrison, marshal, New Mexico		3,350 00
C. D. McDougall, marshal, New York		2,780 00
J. A. McKee, marshal, Texas		2,225 00
S. S. Matthews, marshal, Michigan		3,040 00
J. Monroe, marshal, Michigan		2,548 00
H. H. McMullen, marshal, Delaware		1,721 00
J. M. McClintock, marshal, Missouri		3,095 00
R. C. Movers		30 30
J. G. Nicolay, clerk Supreme Court		28,500 00
J. N. Nelson		10 00
F. W. Oakley, marshal, Wisconsin		1,750 00
G. P. Perkins, marshal, Iowa		2,280 00
J. R. G. Pitkins, marshall, Louisiana		4,702 00
J. N. Patterson, marshal, New Hampshire		1,500 00
W. J. Phillips, marshal, Texas		2,050 00
Z. T. Pearson		199 70
G. Patterson		6 00
C. Price		25 75
R. Root, marshal, Iowa		4,195 00
D. B. Russell, marshal, Arkansas		2,900 00
T. H. Reeves, marshal, Tennessee		700 00
J. S. Rutan, marshal, Pennsylvania		3,934 00
W. C. Raum, marshal, Mississippi		1,140 00
W. S. O. Robinson		92 80
A. Rhemstrom		362 80
E. Root, marshal, New York		80 90
W. A. Smith, marshal, Colorado		3,870 00
P. Strobach, marshal, Alabama		2,100 00
G. Schnitzer, marshal, Wyoming		816 00
B. F. Simpson, marshal, Kansas		1,510 00
J. Smith		10 00
E. Smith		58 70
J. Shankey		2 50
W. C. Stone		732 00
J. H. Speed		900 00
A. C. Tate, marshal, New York		5,807 00
G. N. Tillman, marshal, Tennessee		2,200 00
Z. L. Tidball, marshal, Arizona		2,123 00
J. R. Tanner, marshal, Illinois		2,650 00
M. I. Townsend		100 00
T. J. Tuomy, marshal, South Carolina		1,470 00
P. D. Tyrrell		242 07
J. G. Tracey, marshal, Texas		600 00
Union Pacific R. R. Co		17 26
J. J. H. Van Bokkelin		28 00
J. B. Vrooman		6 75
J C. Weaks, marshal, Louisiana		2,025 00
J. Wheeler, marshal, Illinois		2,475 00
M. T. Williamson, marshal, Tennessee		3,190 00
Carried forward		285,724 48

Miscellaneous expenses, United States courts, 1884—Continued.		
Brought forward		$285,724 48
To L. Wright, marshal, Ohio		5,600 00
P. A. Williams, marshal, Florida		1,491 00
J. G. Watts, marshal, Virginia		1,755 00
H. H. Wells, attorney, District of Columbia		35 00
		294,605 48
Deduct repayments:		
By J. H. Durkee	$86 73	
H. F. Goodspeed	81 03	
C. Hopkins	145 00	
J. N. Kerns	406 75	
J. Longstreet	688 70	
J. Monroe	21 48	
D. B. Russell	422 75	
W. C. Raum	5 00	
J. R. Tanner	455 35	
		2,312 79
		292,292 69
Fees and expenses of marshals United States courts, 1880:		
To J. H. Sloss, Alabama		383 97
Fees and expenses of marshals United States courts, 1881:		
To J. H. Sloss, Alabama		1,285 58
J. C. Ullery, Ohio		226 94
		1,512 52
Fees and expenses of marshals United States courts, 1881 and prior years:		
By F. Coste	$448 01	
C. Hopkins	4 00	
J. M. Kerns	119 16	
M. C. Osborn	58 97	
P. P. Wilcox	15 68	
	645 82	
Fees and expenses of marshals United States courts, 1882:		
To C. C. Allen, Missouri		2,439 37
A. J. Auxur, Kentucky		34 02
E. L. Bierbower, Nebraska		52 12
A. C. Botkins, Montana		1,262 33
T. Boles, Arkansas		3,333 95
J. W. Chapman, Iowa		542 27
R. H. Crittenden, Kentucky		7 73
H. R. Denny, Minnesota		1,226 66
H. Fink, Wisconsin		156 00
J. B. Hill, North Carolina		36 49
C. Hopkins, Washington Territory		65 50
E. A. Ireland, Utah		254 35
J. F. Lewis, Virginia		15 08
J. Longstreet, Georgia		2,336 80
R. N. McLaren, Minnesota		942 70
S. S. Matthews, Michigan		137 11
J. N. Patterson, New Hampshire		7 50
T. H. Reeves, Tennessee		17 90
J. S. Rutan, Pennsylvania		50 00
J. H. Sloss, Alabama		29 82
		12,947 70
Deduct repayment:		
By G. W. Atkinson	$181 25	
C. C. Allen	60 00	
J. H. Durkee	204 77	
M. M. Drew	7 08	
W. F. Goodspeed	716 81	
J. N. Kerns	946 48	
J. Monroe	111 48	
J. R. G. Pitkin	16 26	
J. S. Rutan	50 06	
Carried forward	2,294 19	12,947 70

Fees and expenses of marshals, United States courts, 1882—Continued.		
Deduct repayments:		
Brought forward	$2,294 19	$12,947 70
By W. C. Raum	130 30	
J. C. Ullery	1,306 91	
J. G. Watts	1,915 04	
P. P. Wilcox	1,188 70	
J. C. Weaks	32 57	
		6,867 71
		6,079 99
Fees and expenses of marshals, United States courts, 1883:		
To G. W. Atkinson, West Virginia		2,049 68
A. J. Auxier, Kentucky		2,236 50
C. C. Allen, Missouri		448 72
A. C. Botkins, Montana		921 00
T. Boles, Arkansas		2,000 00
J. Blanchard		5 00
G. D. Bisbee, Maine		12 59
J. W. Chapman, Iowa		412 29
D. Crouch		5 00
E. D. Crouch		5 00
F. Coste, Missouri		188 15
H. R. Denny, Minnesota		633 43
W. B. Deacon, New Jersey		103 76
J. H. Durkee, Florida		22 40
M. M. Drew, California		343 43
G. C. Heberling, Iowa		2,198 85
R. P. Hughes, Virginia		312 72
R. H. Hagood, Alabama		21 70
C. Hopkins, Washington		1,500 00
P. M. Hough		5 00
J. B. Hill, North Carolina		1,801 84
E. A. Ireland, Utah		3,441 73
E. R. Jones		5 00
E. S. Kearney, Oregon		111 90
J. C. Kinney, Connecticut		556 23
J. Longstreet, Georgia		3,000 00
J. M. McClintock, Maryland		1,064 87
J. A. McKee, Texas		1,800 00
C. McMichael, District of Columbia		1,863 67
H. H. McMullen, Delaware		54 36
S. S. Matthews, Michigan		150 90
J. Monroe, Michigan		91 27
A. B. Norton, Texas		853 16
G. D. Perkins, Iowa		344 68
J. R. G. Pitkin, Louisiana		261 37
J. N. Patterson, New Hampshire		74 54
C. T. Pollard, jr., Alabama		104 50
T. H. Reeves, Tennessee		3,434 10
R. Root, Iowa		158 03
B. F. Simpson, Kansas		1,412 48
P. Strobach, Alabama		2,681 53
J. H. Sloss, Alabama		227 69
Z. L. Tidball, Arizona		1,126 61
J. C. Ullery, Ohio		606 21
J. Vickers		5 00
J. C. Weaks, Louisiana		2,212 13
E. N. Weigal, Arkansas		23 20
J. G. Watts, Virginia		2,935 02
		43,827 24
Deduct repayments:		
By C. C. Allen	$495 49	
A. C. Botkins	109 41	
N. P. Banks	312 93	
E. L. Bierbower	133 97	
P. S. Corbett	311 00	
J. H. Coggeshall	116 82	
J. S. Durkee	602 20	
F. T. Dubois	871 03	
J. B. Erhardt	50	
H. Fink	1,176 97	
R. S. Foster	1,451 29	
W. F. Goodspeed	831 17	
W. W. Henry	43 51	
Carried forward	6 456 29	43,827 24

Fees and expenses of marshals, United States courts, 1883—Continued.		
Deduct repayments:		
Brought forward	$6,456 29	$43,827 24
By C. Hopkins	1,880 94	
A. M. Jones	602 62	
T. B. Keogh	850 00	
J. N. Kerns	659 30	
R. D. Locke	684 96	
J. H. McGee	484 56	
J. L. Morphis	14 96	
S. S. Matthews	373 89	
C. D. MacDougall	1,092 41	
A. L. Morrison	11 20	
F. W. Oakley	172 73	
W. J. Phillips	3 80	
G. D. Perkins	902 28	
D. B. Russell	528 60	
W. C. Raum	1,363 45	
J. S. Rutan	405 95	
W. A. Smith	105 19	
G. Schnitzer	11 99	
A. C. Tate	63 42	
Z. L. Tidball	1,900 00	
M. T. Williamson	957 78	
J. Wheeler	107 21	
J. G. Watts	1,411 07	
L. Wright	1,264 17	
		22,308 77
		21,518 47
Fees and expenses of marshals, United States courts, 1884:		
To G. W. Atkinson, West Virginia		13,084 00
A. J Auxier, Kentucky		19,600 00
H. Allen, Dakota		19,400 00
N. P. Banks, Massachusetts		8,500 00
T. Boles, Arkansas		31,500 00
G. D. Bisbee, Maine		3,800 00
E. L. Bierbower, Nebraska		9,000 00
A. C. Botkins, Montana		4,500 00
L. A. Bailey, North Carolina		31 40
P. S. Corbett, Nevada		4,000 00
F. Coste, Missouri		8,000 00
J. H. Coggeshall, Rhode Island		1,500 00
W. B. Deacon, New Jersey		4,150 00
H. R. Menny, Minnesota		7,500 00
M. M. Drew, California		14,230 00
J. H. Durkee, Florida		5,450 00
F. T. Dubois, Idaho		9,500 00
J. B. Erhardt, New Jersey		9,000 00
R. S. Foster, Indiana		8,400 00
H. Fink, Wisconsin		4,600 00
H. S. Gosling, Texas		8,100 00
W. F. Goodspeed, Ohio		4,000 00
R. P. Hughes, Virginia		4,600 00
C. Hopkins, Washington		4,450 00
J. M. Hinds, Alabama		17,300 00
W. W. Henry, Vermont		1,535 57
J. B. Hill, North Carolina		1,900 00
E. A. Ireland, Utah		6,300 00
A. M. Jones, Illinois		4,500 00
J. C. Kinney, Connecticut		1,950 00
J. N. Kerns, Pennsylvania		5,180 00
E. S. Kearney, Oregon		21,000 00
T. B. Keogh, North Carolina		19,300 00
R. D. Locke, Georgia		11,000 00
J. Longstreet, Georgia		18,500 00
J. H. Livingston, South Carolina		10,000 00
J. H. McGee, Missouri		14,000 00
J. L. Morphis, Mississippi		3,757 00
A. L. Morrison, New Mexico		15,700 00
C. D. MacDougall, New York		14,550 00
J. A. McKee, Texas		9,200 00
S. S. Matthews, Michigan		4,100 00
J. Monroe, Michigan		4,000 00
J. M. McClintock, Maryland		5,450 00
C. McMichael, District of Columbia		9,000 00
Carried forward		405,117 97

Fees and expenses of marshals, United States courts, 1884—Continued.		
Brought forward		$405,117 97
To H. H. McMullen, Delaware		1,200 00
F. W. Oakley, Wisconsin		7,400 00
G. D. Perkins, Iowa		10,200 00
J. R. G. Pitkin, Louisiana		5,000 00
W. J. Phillips, Texas		3,900 00
J. N. Patterson, New Hampshire		1,400 00
R. Root, Iowa		11,500 00
D. B. Russell, Arkansas		10,000 00
T. H. Reeves, Tennessee		18,000 00
W. C. Raum, Mississippi		1,770 00
J. S. Rutan, Pennsylvania		8,600 00
W. A. Smith, Colorado		4,500 00
P. Strobach, Alabama		24,050 00
G. Schnitzer, Wyoming		1,192 00
B. F. Simpson, Kansas		6,500 00
A. C. Tate, New York		4,000 00
G. N. Tillman, Iowa		10,000 00
Z. L. Tidball, Arizona		18,900 00
J. R. Tanner, Illinois		10,000 00
T. J. Tuomy, South Carolina		3,000 00
J. C. Weaks, Louisiana		2,857 00
J. Wheeler, Illinois		7,018 70
M. T. Williamson, Tennessee		3,500 00
L. Wright, Ohio		6,350 00
P. A. Williams, Florida		980 00
J. G. Watts, Virginia		14,500 00
		601,435 67
Deduct repayments:		
By C. Hopkins	$1,500 00	
J. N. Kerns	305 40	
D. B. Russell	235 92	
W. C. Raum	20 90	
		2,062 22
		599,373 45
Fees of district attorneys, United States courts, 1883:		
To H. M. Bennett		58 00
T. M. Chester		79 38
G. C. Randolph		10 00
		147 38
Fees of district attorneys, United States courts, 1884:		
To J. B. Allen, Washington		1,478 20
F. W. Angel, New York		1,350 00
C. Almy, jr., Massachusetts		1,500 00
W. W. Adams, United States courts		1,500 00
Andrews & Thornburgh		1,161 15
H. P. Brown, Pennsylvania		2,250 00
J. A. Baldwin, Illinois		688 82
J. S. Boal, Illinois		1,650 00
W. K. Blodgett, Massachusetts		800 00
J. C. Bigger, Texas		1,311 00
J. E. Boyd, North Carolina		6,338 90
W. Bagley, North Carolina		750 00
W. S. Ball, North Carolina		1,275 00
W. H. Bliss, Maine		3,255 00
C. H. Burns, New Hampshire		606 60
A. W. Brazee, Colorado		1,665 57
B. Butterworth, District of Columbia		1,500 00
M. C. Brown, Wyoming		697 20
G. Bliss, District of Columbia		2,500 00
W. W. Bishop, Colorado		2,000 00
J. A. Bentley, Colorado		328 12
A. Bouchard, District of Columbia		1,570 00
W. J. Bouchan		3,500 00
E. M. Bartlett, Nebraska		131 90
G. B. Corkhill, District of Columbia		8,688 32
G. C. Chandler, Mississippi		2,480 10
H. J. Campbell, Dakota		2,607 80
J. B. Clough, Tennessee		1,125 00
Carried forward		54,717 68

Fees of district attorneys, United States courts, 1884—Continued.	
Brought forward	$54,717 68
To A. Chester, New York	1,687 50
C. K. Cobb, Massachusetts	300 00
C. A. Congdon, Minnesota	553 50
D. C. Cram, Iowa	1,100 00
C. Cook, California	1,875 00
D. Cameron, Pennsylvania	937 50
S. B. Clarke, New York	2,625 00
J. P. Clarke, New York	1,500 00
E. M. Cheney, Florida	2,015 60
J. A. Connelly, Illinois	4,115 20
D. Chadwick, Connecticut	1,201 80
W. H. H. Clayton, Arkansas	5,710 00
J. H. Clark, Colorado	27 00
T. Coffin, Nevada	1,152 40
S. M. Cutcheon, Michigan	963 00
R. B. Carpenter, District of Columbia	259 66
W. H. DeWitt, Montana	1,211 80
L. W. Day, Alabama	820 51
C. G. B. Drummond, Missouri	1,350 00
J. R. Dillen, Tennessee	900 00
S. A. Darnell, Georgia	3,306 90
G. DuRelle, Kentucky	925 50
W. S. Decker, District of Columbia	9,500 00
N. F. Dixon, Rhode Island	1,318 60
G. M. Dusken, Alabama	1,514 60
C. M. Dawes	252 75
W. H. Dickson, Utah	555 00
E. W. Eggleston, Ohio	2,104 60
A. J. Evans, Texas	2,026 80
M. C. Elster, Louisiana	653 60
J. W. Finney, Michigan	1,500 00
B. B. Foster, New York	2,625 00
W. H. H. Flick, West Virginia	2,895 20
J. H. Ferguson, West Virginia	3,000 00
H. Gilpin, Pennsylvania	1,875 00
J. W. Gurley, Louisiana	1,875 00
R. Guffin, Missouri	1,125 00
G. A. Grace, Arkansas	900 00
E. Guthridge, Texas	130 00
C. D. Gurley, Colorado	300 00
S. G. Hilborn, California	3,375 00
K. Haskins, Vermont	510 40
G. W. Hazeltine, Wisconsin	1,604 20
C. L. Holstein, Indiana	1,284 40
H. Hooper, Ohio	1,500 00
G. E. P. Howard, New York	1,500 00
C. A. Hess, New York	997 30
J. R. Hallowell, Kansas	4,429 55
W. W. Hyde, Michigan	1,364 85
J. Hutchings, United States courts	4,060 00
C. Hatton, Kansas	420 00
F. Irvine, District of Columbia	873 63
J. C. Jenkins, Georgia	975 00
C. F. James, New York	252 80
P. L. Jones, Alabama	500 00
G. M. Keasby, New Jersey	600 00
H. M. Kellogg, Iowa	29 89
W. W. Ker, District of Columbia	3,450 00
A. Q. Keasby, New Jersey	978 00
W. F. Lunt, Maine	1,366 00
J. B. Leake, Illinois	2,023 00
D. S. Lewis, Virginia	2,594 40
H. M. Lewis, Wisconsin	1,174 00
L. Lea, Mississippi	762 00
G. M. Lambertson, Nebraska	2,257 70
A. H. Leonard, Louisiana	1,067 50
J. M. Meek, Tennessee	6,656 60
C. H. McCarer, Indiana	1,275 00
S. W. Melton, South Carolina	6,626 00
R. T. Merrick, District of Columbia	7,500 00
W. McAllister, jr., California	1,500 00
A. McClain, Tennessee	4,433 20
E. Marshall, Texas	717 29
J. Millay	300 00
Carried forward	192,364 41

Fees of district attorneys, United States courts, 1884—Continued.	
Brought forward	$192,364 41
To J. S. Nickerson, Pennsylvania	1,875 00
M. D. O'Connell, Iowa	2,772 40
G. W. Prichard, New Mexico	4,636 80
C. S. Palmer, Dakota	1,071 48
J. C. Patterson, Delaware	620 00
S. J. Pemberton, North Carolina	500 00
J. C. Palmer, Arkansas	500 00
G. Paschal, Texas	1,306 80
G. B. Patterson, Florida	365 60
W. F. Posten, Tennessee	2,596 60
H. R. Probasco, District of Columbia	400 00
F. H. Perry, Iowa	225 00
W. S. Perry, District of Columbia	69 33
A. Quackenbush, Idaho	35 00
A. M. Rogers, Maryland	900 00
E. T. Roe, Illinois	1,125 00
W. T. Rankin, Iowa	750 00
J. S. Rumell, Iowa	3,522 70
E. Root, New York	4,925 64
C. Richards, Ohio	1.680 00
W. S. O. Robinson, North Carolina	2,786 20
S. H. Reynolds, Pennsylvania	634 89
E. Speer, Georgia	10,222 45
W. H. Smith, Alabama	6,006 20
E. Smith, Missouri	900 00
A. E. Stratton, Texas	157 30
J. W. Stine, Michigan	1,930 20
G. P. Sanger, Massachusetts	2,730 00
E. T. Sprague, Utah	1,376 40
Z. Snow, Utah	750 00
C. B. Smith, Kansas	1,125 00
J. P. Smith, Tennessee	900 00
W. A. Stone, Pennsylvania	3,733 80
D. B. Searle, Minnesota	4,315 60
A. Sterling, Maryland	1,315 00
I. N. Stevens, Colorado	284 39
A. W. Tenny, New Jersey	1,925 00
G. Turner, Alabama	565 00
M. I. Townsend, New York	4,639 40
O. B. Thomas, Wisconsin	1,750 00
G. M. Thomas, Kentucky	4,100 50
R. S. Tuthill, Illinois	345 00
H. N. Tift, New York	127 70
P. T. Van Zile	260 06
J. K. Valentine, Pennsylvania	2,325 00
J. S. Wise, Virginia	500 00
C. C. Waters, Arkansas	2,402 80
J. Wingate, South Carolina	1,500 00
W. V. S. Woodward, New York	1,687 50
G. C. Wilson, Pennsylvania	1,875 00
H. H. Wells, District of Columbia	2,859 00
E. Waddell, Virginia	2,069 60
D. K. Watson, Ohio	900 00
J. F. Watson, Oregon	4,980 00
W. Warner	2,526 38
A. S. Worthington, District of Columbia	4,900 04
C. E. Woods, Alabama	873 28
W. R. White, Idaho	1,630 00
F. Wood, Idaho	50 00
H. R. Ware, Mississippi	900 00
M. L. York, Arkansas	1,058 70
J. A. Zabriskee, Arizona	3,083 40
	311,242 49
Fees of clerks United States courts, 1882:	
To A. C. Emerson	280 00
C. H. Foster	17 75
C. H. Hill	2 00
W. H. Hackett	22 65
W. Wilkerson	50 00
	372 40
Fees of clerks United States courts, 1883:	
To H. E. Andrews, Tennessee	$975 35
A. R. Ayres, Washington Territory	10 00
J. W. Chew, Maryland	500 65
J. W. Dimmick, Alabama	1,255 95
L. B. Dellicker, West Virginia	1,181 22
B. W. Ethridge, Tennessee	1,083 05
J. C. Fennell, Kentucky	25 00
R. L. Goodrich, Arkansas	1,042 10
G. R. Hiil, Mississippi	955 40
W. S. Harsha, Michigan	409 26
J. E. Hagood, South Carolina	336 63
S. Hoffman, California	1,368 49
W. B. Lurty, Virginia	21 25
E. O. Locke, Florida	180 00
G. W. Morris, Virginia	99 15
S. C. McCandless, Pennsylvania	419 75
T. Muffley, Montana	237 90
A. W. McCullogh, Alabama	321 81
J. W. Meldrum, Wyoming	94 85
M. F. Pleasants, Virginia	1,131 85
H. Y. Peck, Wisconsin	97 90
J. W. Payne, North Carolina	598 68
F. W. Rives, Virginia	23 00
N. J. Riddick, North Carolina	150 15
S. R. Smith	536 20
E. H. Smith, New Mexico	1,035 01
F. M. Stewart, Wisconsin	492 80
E. M. Seabrook, South Carolina	161 35
W. H. Shaw, North Carolina	1 80
A. S. Thomas, Kansas	130 30
	14,876 85
Deduct repayment:	
By A. E. Buck	21 30
	14,855 55
Fees of clerks United States courts, 1884:	
To J. R. Alden, Montana	51 20
H. E. Andrews, Tennessee	752 75
W. A. Allen, Texas	500 22
A. R. Ayres, Washington Territory	290 05
W. C. Brooks, North Carolina	35 93
G. R. Bowman, New Mexico	775 00
A. E. Buck, Georgia	7,666 75
B. C. Barroll, Arizona	561 30
C. T. Barry, Virginia	638 60
E. Bill, Ohio	1,836 00
N. C. Butler, Indiana	1,707 30
D. Beall, Texas	1,709 77
E. F. Bishop, Colorado	50 70
L. T. Baxter, Tennessee	3,584 45
W. H. Bradley, Illinois	1,108 80
J. W. Bruner, Wyoming	63 60
S. Bell, Pennsylvania	230 00
B. L. Benedict, New York	651 35
J. W. Chew, Maryland	1,276 85
M. B. Converse, Illinois	3,607 83
S. J. Clark, Arkansas	32 00
E. R. Campbell, Tennessee	617 57
B. F. Clark, New Hampshire	315 00
H. C. Cowles, North Carolina	1,326 05
S. B. Crail, Kentucky	2,061 05
J. H. Clark, Missouri	1,514 15
A. R. Z. Dawson, Dakota	274 30
E. S. Dundy, jr	856 85
C. Dart, Texas	433 05
L. B. Dellicker, West Virginia	521 05
J. W. Dimmick, Alabama	1,411 10
J. Devonshire, Louisiana	260 00
A. H. Davis, Maine	239 74
W. S. Doolittle, New York	279 85
A. C. Emerson, Utah	495 00
M. Erwin, Georgia	1,204 60
B. W. Etheridge, Tennessee	718 25
Carried forward	39,658 06

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Fees of clerks United States courts, 1884—Continued.	
Brought forward	$39,658 06
To E. G. Egerton, Dakota	751 30
W. M. Elliott, Virginia	190 48
J. H. Finks, Texas	1,160 13
J. S. Fowler, Virginia	47 70
J. C. Fennell, Kentucky	797 75
G. J. Foster, Dakota	56 85
C. F. Foster, Florida	46 90
E. D. Frank, Nebraska	685 60
F. W. Gerand, Texas	153 75
B. Gildersleeve, Virginia	1,912 10
R. L. Goodrich, Arkansas	1,119 02
H. D. Gamble, Pennsylvania	614 80
H.C. Geisburg, Virginia	407 65
T. Griffith, New York	1,168 89
C. B. Germain, New York	472 02
G. R. Hill, Mississippi	1,003 30
A. R. Humes, Tennessee	4,311 28
W. S. Harsha, Michigan	1,002 55
S. Hoffman, California	2,236 95
W. H. Hackett, New Hampshire	416 70
W. C. Howard, Ohio	907 36
H. M. Hinsdell, Michigan	837 81
C. B. Hinsdell, Michigan	1,133 55
J. E. Hagood, South Carolina.	302 50
C. H. Hill, Massachusetts	1,246 43
O. B. Hollis, Minnesota	401 20
J. A. Jones, Illinois	854 35
J. K. Jeffrey, Wyoming	220 05
E. Kurtz, Wisconsin	1,124 75
H. H. King, Georgia	1,542 25
J. Knight, Wyoming	67 50
R. H. Lamson, Oregon	4,227 90
W. B. Lurty, Virginia	306 05
E. O. Locke, Florida	416 40
H. K. Love, Iowa	1,810 35
C. S. Lincoln, Pennsylvania	335 00
R. B. Lehman, North Carolina	129 85
G. W. Morris, Virginia	1,240 12
S. C. McCandless, Pennsylvania	1,635 80
A. W. McCullough, Alabama.	3,486 40
J. W. Meldrum, Wyoming	485 80
E. E. Marvin, Connecticut	440 70
J. Y. Moore, West Virginia	1,836 35
J. M. McKee, Mississippi	262 98
A. McGehee, Mississippi	310 33
E. R. Mason, Iowa	159 80
N. C. Morgan, Dakota	645 05
H. L. McCling, Tennessee	84 70
S. D. Oliphant, New York	630 00
R. G. O'Brien, Washington Territory	207 15
C. M. Phillips, New Mexico	1,973 58
H. Pitman, Rhode Island	881 05
H. J. Peck, Wisconsin	64 60
M. F. Pleasants, Virginia	1,097 55
W. B. Preble, Maine	626 90
J. R. Puryear, Kentucky	111 60
J. W. Payne, North Carolina.	697 52
F. W. Rives, Virginia	193 30
A. J. Ricks, Ohio	1,070 93
W. C. Robards, Texas	1,513 25
A. L. Richardson, Idaho	504 45
J. C Reed, North Carolina	1,493 91
G. C. Rives, Texas	579 67
W. M. Reed, Texas	123 60
L. Rowe, New Jersey	870 90
W. Robbins, New York	1,262 05
N. J. Riddick, North Carolina.	617 42
E. M. Seabrook, South Carolina.	3,250 95
L. S. B. Sawyer, California	2,441 90
L. Schmidt, Missouri	2,385 35
E. H. Smith, New Mexico	785 64
F. A. Shaw, Arizona	659 60
W. H, Shaw, North Carolina.	120 85
J. Seavey, Washington	465 15
F. M. Stewart, Wisconsin	392 26
W. A. Spencer, Minnesota	874 05
Carried forward	110,560 29

Fees of clerks United States courts, 1884—Continued.	
Brought forward	$110,560 29
To W. E. Singleton, Texas	1,042 10
E. T. Sprague, Utah	90 00
B. B. Smalley, Vermont	82 80
H. Squier, Idaho	305 89
A. P. Selby, Missouri	325 00
H. S. Skaats, Alabama	189 65
J. G. Stetson, Massachusetts	1,090 85
S. R. Smith, Delaware	618 85
J. E. Tinker, North Carolina	161 70
W. B. Thews, Idaho	144 30
A. S. Thomas, Kansas	150 90
N. W. Tumble, Alabama	828 15
A. J. Van Duzee, Iowa	1,128 55
J. R. Wilkins, Utah	554 55
J. W. Wheaton, Louisiana	278 05
S. Wheeler, Arkansas	4,622 63
L. S. Williams, Arizona	265 60
W. B. Wall, Virginia	395 40
J. C. Wilson, Kansas	3,059 49
B. S. Williams, Dakota	65 00
W. Wilkerson, Arizona	485 60
P. Walter, Florida	761 77
	127,207 12
Rent of court-rooms, United States courts, 1880:	
To J. Sherman, jr	60 00
Rent of court-rooms, United States courts, 1882:	
To A. Davis	42 00
Erie County, Pennsylvania	100 00
Gallatin County, Montana	75 00
A. Heed	40 00
Lawrence County, Dakota	375 00
L. Lopez	36 00
J. Moya	36 00
A. B. Norton	300 00
Pottawattamie County, Iowa.	150 00
Turpin & Ogden	250 00
	1,404 00
Rent of court-rooms, United States courts, 1883:	
To Ada County, Idaho	54 94
Albany County, Wyoming	200 00
C. E. Balch	50 00
S. Bastable	300 00
Board county commissioners, Yankton, Dakota	800 00
S. Cochran	375 00
K. G. Cooper	550 00
City council, Montgomery, Ala	375 00
J. G. Christopher	275 00
W. J. Cox	150 00
J. T. Cotton & Co	125 00
County of Shelby, Tennessee.	450 00
M. M. Ada, Calhoun.	250 00
County of Deer Lodge, Montana	150 00
County commissioners, Hillsborough, Florida	13 00
N. T. De Motta	72 00
W. N. Dusenberry	500 00
Erie County, Pennsylvania	100 00
Estate of J. Archer	450 00
J. C. French	750 00
Faucon & Levique	23 33
Gallatin County, Montana	300 00
N. Groesbeck	500 00
Greenville County, South Carolina	125 00
W. M. Harrison	200 00
J. Hagerman	75 00
T. D. Isom	100 00
D. H. King	131 25
Carried forward	7,444 52

Rent of court rooms, United States courts, 1883—Continued.	
Brought forward	$7,444 52
To Leavenworth County, Kansas	150 00
Laramie County, Wyoming	600 00
Lewis and Clarke County, Montana	150 00
Lawrence County, Dakota	375 00
Lycoming County, Pennsylvania	150 00
A. McCue	833 33
McCracken County, Kentucky	125 00
M. H. Maynard	125 00
C. P. Mendenhall	50 00
W. S. Neilson	20 00
B. F. Newcomer	350 00
A. B. Norton	900 00
Ormsby County, Nevada	600 00
R. H. Platt	250 00
President board commissioners, Cass County, Dakota	500 00
Pottawattamie County, Iowa	300 00
Rockingham County, Virginia	187 00
J. E. Ryus	150 00
D. Reache	200 00
J. E. Stone	250 00
J. B. Smith	250 00
S. C. Stevenson	22 58
E. O. Sykes	100 00
N. Smith	250 00
W. Scanlon	225 00
Town of Danville, Va	500 00
Toledo Produce Exchange	300 00
Turpin & Ogden	250 00
J. E. Thomson	175 00
Town of Del Norte	100 00
Tuttle & Thomas	20 00
Uintah County, Wyoming	50 00
Washington County, Virginia	125 00
D. H. Weston	120 00
E. C. Williams, Wiley & Cox	200 00
Western Star Lodge	75 00
	16,472 43
Rent of court rooms, United States courts, 1884:	
To J. Archer's estate	900 00
M. Amador	24 00
Ada County, Idaho	375 00
Albany County, Wyoming	200 00
C. E. Balch	150 00
S. Baca	60 00
S. Bastable	300 00
J. C. Bogel	17 50
W. P. Beckham	14 00
S. Cochran	375 00
J. T. Cotton & Co	375 00
M. M. A. Calhoun	750 00
K. G. Cooper	1,650 00
W. J. Cox	150 00
J. G. Christopher	825 00
City council, Montgomery, Ala	1,125 00
F. R. Clayton	300 00
County commissioners, Hillsborough, Florida	40 00
J. B. De Sona	192 00
Deer Lodge County, Montana	150 00
R. Evans	25 00
Estate of J. E. Thompson	525 00
Faucon & Leveque	70 00
J. C. French	1,125 00
N. Groesbeck	1,500 00
Greenville County, South Carolina	250 00
W. M. Harrison	400 00
J. Hagerman	225 00
Hall Brothers	900 00
A. R. Harlow	270 38
T. D. Isom	100 00
D. H. King	372 09
Carried forward	13,734 97

Rent of court rooms, United States courts, 1884—Continued.	
Brought forward	$13,734 97
To Lycoming Company, Pennsylvania	50 00
Leavenworth County, Kansas	150 00
Laramie County, Wyoming	600 00
Lewis and Clarke County, Montana	225 00
M. H. Maynard	42 10
A. McCue	9,166 63
A. Moya	60 00
McCracken County, Kentucky	125 00
J. L. L. McCall	450 00
C. P. Mendenhall	75 00
W. S. Neilson	60 00
B. F. Newcomer	1,050 00
A. B. Norton	600 00
Nez Perce	30 00
R. H. Platt	750 00
Pima County, Arizona	750 00
Pottawattamie County, Iowa	150 00
J. Rice	225 00
Rockingham County, Virginia	63 00
D. Reache	400 00
E. O. Sykes	200 00
J. B. Smith	750 00
N. Smith	750 00
J E. Stone	750 00
Shelby County, Tennessee	1,350 00
S. C. Stevenson	112 50
W. Scanlon	675 00
Thomas Shaw	5 00
G. C. Symes	750 00
H. Squire	30 00
Turpin & Ogden	750 00
Toledo Produce Exchange	900 00
Uinta County, Wyoming	150 00
Western Star Lodge	150 00
D. H. Weston	120 00
C. C. Williams, Wiley & Cox	600 00
W. R. Whitson	100 00
Washington County, Virginia	250 00
	37,149 20
Fees of commissioners United States courts, 1882:	
To J. C. Anderson, North Carolina	5 25
O. P. Abercrombie	5 30
J. T. Birdseye, Missouri	20 45
R. Barber, District of Columbia	19 35
J. W. Beck, Georgia	14 75
F. Bloodgood, Wisconsin	55 00
L. W. Chamberlain, Ohio	65 00
T. H. Conner, Texas	7 35
W. A. Coleman	2 25
E. N. Corey	114 70
D. D. Davies, North Carolina	2 50
E. T. Ensign	5 80
W. F. Gleason, North Carolina	34 10
F. Ives, Minnesota	25 00
E. T. Jones, West Virginia	11 85
C. Justice, North Carolina	17 80
A. Jordan	37 00
M. R. King	20 65
W. H. Loftin, Georgia	8 65
J. W. McNeal, Kansas	15 00
S. C. Mills, District of Columbia	52 25
W. G. B. Morris, North Carolina	32 30
W. A. McTeer	5 00
W. G. Mather	3 00
J. A. Osborn, New York	12 00
C. W. Porter, Vermont	10 20
A. J. Perdue	17 85
J. S. Relyea, New Mexico	40 00
Carried forward	660 35

Fees of commissioners United States courts, 1882—Continued.		
Brought forward		$660 35
To J. P. Rogers, Tennessee		22 75
S. Roberts		129 70
W. S. Thomas, Ohio		5 00
W. R. Thompson, West Virginia		20 95
B. White, Ohio		5 00
G. P. Waldron, Dak		7 00
E. H. Wylie		14 20
		864 95
Fees of commissioners United States courts, 1883:		
To C. L. Adams, New York		88 25
H. E. Andrews, Tennessee		117 50
L. B. Anderson, Georgia		58 90
W. Angel, New York		36 50
W. Ausmurs, Tennessee		136 10
J. C. Anderson, North Carolina		104 40
J. C. Brittain, Georgia		200 45
R. H. Beck, Colorado		196 20
O. G. Burch, Missouri		8 05
J. W. Beck, Georgia		195 40
S. Bell, Pennsylvania		63 15
C. S. Bundy, District of Columbia		41 45
R. E. Boyd, Georgia		45 50
F. Bloodgood, Wisconsin		220 95
J. S. Bradford, Illinois		719 10
R. Barber, District of Columbia		64 05
C. Brietz, North Carolina		78 15
I. H. Bonsall, Kansas		67 10
C. C. Binckley, Indiana		16 30
T. H. Butler, Tennessee		39 10
J. Buzzolara, Arkansas		504 05
W. Bowling, Kentucky		241 20
A. T. Barbee, Kentucky		291 45
L. W. Billingsley, Nebraska		194 50
C. H. Bartlett, New Hampshire		63 20
R. M. Barton, Tennessee		242 35
J. W. Burton, North Carolina		268 95
W. G. Boyle, North Carolina		40 05
W. L. Bryan, North Carolina		48 55
A. B. Braley, Wisconsin		9 85
C. Craycroft, Missouri		35 60
W. L. Custer, jr., Tennessee		18 60
M. R. Cullen, Missouri		28 75
E. N. O. Clough, Kansas		18 95
H. F. Cassen, Kentucky		21 95
S. B. Crail, Kentucky		197 55
H. Cabaniss, North Carolina		60 60
A. Collins, Georgia		115 40
J. A. Colwell, Michigan		18 20
J. L. Conley, Georgia		167 70
A. Corse, Mississippi		8 80
L. Claiborne, Virginia		71 05
E. S. Dundy, jr., Nebraska		28 20
P. Davis, Kansas		9 55
S. C. Dunlap, Georgia		694 05
P. R. Deady, Oregon		208 00
J. M. Deuel, New York		157 35
R. A. Donnelly, Tennessee		111 60
J. T. Davidson, New York		106 60
B. W. Etheridge, Tennessee		86 25
E. G. Evans, Missouri		35 85
M. Erwin, Georgia		10 00
H. R. Edwards, Pennsylvania		57 20
W. C. Emmert, Tennessee		63 90
S. Ellison, New Mexico		44 35
H. D. Fitzgerald, New York		255 20
T. B. Ford, Kentucky		5 70
J. S. Fowler, Virginia		68 15
J. C. Finnell, Kentucky		71 65
C. B. Faris, Kentucky		189 96
J. L. Fairchild, New York		80 12
W. J. Folsom, Tennessee		124 65
M. Finn, Michigan		9 45
Carried forward		7,582 38

Fees of commissioners United States courts, 1883—Continued.		
Brought forward		$7,582 38
To C. Gibbons, jr., Pennsylvania		240 40
W. W. Gilbert, New York		505 80
R. L. Goodrich, Arkansas		411 60
A. D. Greenwood, California		154 60
W. T. Gleason, North Carolina		86 90
W. K. Gould, Minnesota		93 40
J. Graves, Michigan		207 40
J. W. Green, Tennessee		72 55
F. W. Gregg, Arizona		92 15
J. C. Givens, New Mexico		7 70
L. H. Gage, Michigan		31 85
F. W. Giraud, Texas		25 75
B. Gildersleeve, Virginia		304 35
J. S. Harbour, Virginia		179 65
A. Hall, Ohio		105 05
P. A. Hoyne, Illinois		201 75
E. M. Hunt, Louisiana		106 98
J. D. Husbands, New York		214 95
F. Hardin, North Carolina		40 85
J. G. Harrison, New York		11 75
A. Hazeltine, New York		139 80
J. G. Hirschback, New York		5 75
P. R. Hardin, North Carolina		71 10
A. Hees, New York		112 60
M. E. Hutchinson, South Carolina		192 15
J. B. Harper, Indiana		20 35
H. Hanson, Tennessee		232 15
A. Hobbs, Iowa		756 50
A. W. Hoffman, Georgia		39 25
S. Hoffman, California		155 75
G. W. Henderson, Tennessee		21 05
S. P. Hale, Tennessee		71 80
H. L. Hallett, Massachusetts		645 30
E. W. Hendrick, California		21 45
E. B. Harrison, Arkansas		327 20
J. G. Harrison, Indiana		5 00
W. H. Johnson, Texas		17 25
A. W. Jones, Ohio		11 45
J. E. Johnston, Tennessee		189 90
McL. Jones, Missouri		353 80
M. Kirkpatrick, Pennsylvania		24 50
R. C. Kinkead, Kentucky		5 00
J. F. Knox, Texas		141 50
M. Key, Iowa		181 25
E. O. Locke, Florida		23 70
W. G. Lane, Louisiana		109 35
J. M. Landon, New York		303 00
E. J. Leech, Iowa		309 45
H. T. Lee, California		428 45
R. H. Lamson, Oregon		60 40
H. B. Lindsey, Tennessee		108 45
J. W. Lacey, Tennessee		22 95
E. E. Lewis, Iowa		18 35
M. A. Lewis, Tennessee		16 75
G. W. Morris, Virginia		29 70
J. H. Merrill, Wisconsin		8 65
H. C. McWhorter, West Virginia		34 95
J. A. Murray, New York		271 85
C. W. Mead, New York		458 75
J. M. McCormick, Texas		35 50
J. W. Morgan, New Jersey		32 30
M. McDonough, New York		221 30
F. W. Munson, Indiana		22 60
C. Martindale, Indiana		22 20
H. J. Milligan, Indiana		35 55
W. Morgan, Missouri		113 40
O. McClendon, Georgia		354 35
S. C. Mills, District of Columbia		68 60
W. G. Mathes, Tennessee		81 00
J. Mefford, Tennessee		82 80
E. E. Marvin, Connecticut		98 80
S. C. McCandless, Pennsylvania		93 75
W. Muirhead, New Jersey		418 80
W. A. McTeer, Tennessee		99 70
R. J. MacDonald, Michigan		77 75
Carried forward		18,483 81

Fees of commissioners, United States courts, 1883—Continued.	
Brought forward	$18,483 81
To L. Neale, Kansas	32 15
S. B. Noe, Tennessee	34 20
C. W. Nottingham, Michigan	61 70
G. C. Neill, North Carolina	116 07
J. A. Osborn, New York	74 90
R. G. O'Brien, Washington	44 00
G. L. Ogden, Tennessee	128 25
M. F. Pleasants, Virginia	33 45
F. W. Perkins, Missouri	136 90
H. J. Peck, Wisconsin	9 55
J. E. Pound, New York	105 00
H. Phillips, Pennsylvania	68 90
B. Powell, West Virginia	80 55
C. W. Porter, Vermont	11 00
J. W. Payne, North Carolina	35 25
W. Patterson, New Jersey	71 65
A. H. Parker, Kentucky	28 35
A. J. Perdie, District of Columbia	156 65
F. M. Pittman, North Carolina	5 00
J. M. Phillips, Tennessee	16 30
J. R. Puryear, Kentucky	6 85
J. T. Patterson, North Carolina	147 55
J. A. Quintero, Louisiana	361 20
P. Ravasies, Alabama	374 25
R. L. Rogers, Maryland	318 10
L. Rowe, New Jersey	43 55
J. Ricketts, Texas	388 30
G. S. Richardson, Kansas	49 75
T. R. Roulhac, Alabama	16 80
M. T. Roberts, Kentucky	444 75
E. B. Rawson, Florida	1 50
J. P. Rogers, Tennessee	13 60
J. P. Rader, Tennessee	263 35
J. S. Rilea, New Mexico	12 65
E. H. Smith, New Mexico	16 40
F. M. Stewart, Wisconsin	179 55
C. B. Scott, Missouri	9 75
N. B. Sylvester, New York	346 25
L. S. B. Sawyer, California	380 40
L. W. Scott, New Jersey	5 00
J. C. Strong, New York	165 80
W. A. Spencer, Minnesota	288 30
A. P. Selby, Missouri	24 40
T. S. Spates, West Virginia	33 90
H. S. Skaats, District of Columbia	170 85
J. B. Slatterly, Louisiana	30 65
J. A. Shields, New York	346 90
S. R. Smith, Delaware	36 50
A. T. Sumney, North Carolina	69 15
J. W. Smith, South Carolina	26 90
J. W. Scott, Missouri	42 65
H. K. Slover, Tennessee	115 50
F. P. Tustin, Oregon	77 95
J. C Tipton, Tennessee	56 15
J. H. Tinsley, Kentucky	294 95
J. T. Watson, Virginia	37 25
J. H. Wallace, Alabama	617 00
B. White, Ohio	172 30
J. C. Wilson, Kansas	51 75
C. L. Ware, Kansas	11 15
J. C. Wood, Kentucky	24 25
R. P. Waring, North Carolina	5 00
S. Wheeler, Arkansas	1,118 50
S. M. Walker, Georgia	197 95
W. K. White, Iowa	15 00
J. W. Webster, Colorado	66 40
S. Williams, Tennessee	254 55
A. D. Wilkinson, Tennessee	36 60
G. W. Wakefield, Iowa	25 25
E. Wallace, North Carolina	321 15
F. J. Washabaugh, Dakota	54 85
B. Zwart, Missouri	48 25
	27,950 93

Fees of commissioners, United States courts, 1884:	
To C. L. Adams, New York	$512 58
J. M. Allred, Georgia	451 55
J. R. Allen, Montana	15 85
W. Angel, New York	16 80
G. Anderson, Nebraska	90 35
H. E. Andrews, Tennessee	54 55
J. M. Allen, North Carolina	229 60
E. A. Austin, Kansas	6 25
W. Ausmus, Tennessee	153 05
O. P. Abercombrie, Colorado	17 35
J. J. Allen, District of Columbia	837 95
R. Barber, Alabama	2,150 53
J. W. Beck, Georgia	601 05
C. S. Bundy, District of Columbia	123 80
G. M. Bond, Maryland	87 90
J. E. Badger, Maine	12 15
R. E. Boyd, Georgia	279 05
N. M. Burford, Texas	85 65
J. S. Bradford, Illinois	1,344 90
W. M. Bennett, Virginia	9 40
K. H. Buck, Colorado	56 40
R. M. Barton, jr., Tennessee	722 25
S. Bell, Pennsylvania	177 40
W. W. Brown, Georgia	167 65
G. P. Bondurant, Virginia	84 00
J. C. Brittain, Georgia	417 35
T. H. Butler, Tennessee	83 70
F. Bloodgood, Wisconsin	575 50
W. A. Bolt, South Carolina	30 55
I. H. Bonsall, Kansas	67 40
J. Brizzolara, Arkansas	1,305 45
J. H. Bone, Alabama	951 55
J. Bauskett, South Carolina	229 60
L. T. Baxter, Tennessee	94 05
J. Buck, Tennessee	21 70
W. L. Bryan, North Carolina	141 55
R. T. Byrne, Texas	23 35
L. W. Billingsley, Nebraska	384 80
J. F. Barker, Florida	9 65
S. G. Brooks, Missouri	51 15
S. Baird, Wisconsin	41 25
A. E. Buck, Georgia	68 85
G. B. Brooks, Michigan	205 65
C. B. Buckner, Florida	24 40
J. T. Barbee, Kentucky	243 55
W. G. Boyle, North Carolina	216 90
C. T. Bacry, Virginia	14 70
J. W. Branham, Georgia	545 80
J. Bentley, Texas	40 05
J. J. Bergen, New Jersey	11 10
C. F. Baldwin, Ohio	9 10
J. W. Burton, North Carolina	91 45
C. P. Barrett, South Carolina	386 50
R. L. Benedict, New York	104 25
J. L. Brown, Tennessee	99 55
E. Capless, New Mexico	110 65
I. N. Cardozo, Minnesota	721 75
M. R. Cullen, Missouri	167 75
A. Collins, Georgia	574 45
F. H. Clark, Kansas	13 60
C. B. Coatney, Tennessee	98 90
E. N. O. Clough, Kansas	144 40
B. M. Cantrell, Tennessee	41 20
C. Conner, Michigan	13 00
S. G. Coffinberry, Michigan	25 85
J. Campbell, Arizona	219 55
J. L. Conley, Georgia	1,072 25
H. Cabaniss, North Carolina	34 30
W. I. Cook, West Virginia	34 60
L. A. Chapman, Missouri	17 00
D. Cogdell, North Carolina	19 45
S. B. Crail, Kentucky	270 20
H. C. Cowles, North Carolina	25 95
L. Congleton, Dakota	158 95
H. L. Claiborne, Virginia	206 40
E. N. Corey, Dakota	25 75
S. J. Clark, Arkansas	5 65
W. F. Craig, North Carolina	115 65
Carried forward	18,895 71

1883–'84. JUDICIARY.

Fees of commissioners, United States courts, 1884—Continued.	
Brought forward	$18,895 71
To A. W. Campbell, North Carolina	74 50
J. W. Calder, North Carolina.	71 50
H. S. Carroll, Georgia	214 80
W. G. Crockett, Tennessee	71 40
C. B. Coatney, Tennessee	21 60
R. G. Cook, Kansas	15 30
C. M. Dennison, New York	252 75
J. T. Davidson, New York	176 05
T. C. Dell, Texas	94 40
G. W. Davidson, Tennessee	132 05
P. R. Deady, Maine	863 70
J. H. Downing, Kansas	66 90
J. M. Denel, New York	341 05
W. S. Doolittle, New York	71 00
J. W. Dimmick, Alabama	66 10
D. Dubois, West Virginia	67 55
E. S. Dundy, jr., Nebraska	47 05
J. M. Davis, Michigan	46 40
S. C Dunlap, Georgia	988 70
J. Denton, Kentucky	12 05
R. A. Donnelley, Tennessee	179 25
D. D. Davies, North Carolina.	907 65
D. T. Dunn, Georgia	34 20
W. W. Douglass, Rhode Island	7 75
A. T. Dillard, Virginia	208 86
C. H. Dillon, Dakota	58 90
M. Erwin, Georgia	435 30
E. G. Evans, Missouri	20 65
E. T. Ensign, Colorado	10 95
T. L. Edelin, Kentucky	170 80
W. E. Emmert, Tennessee	137 65
N. W. Evans, Ohio	14 15
L. M. Erwin, Georgia	152 75
M. Finn, Michigan	39 98
H. D. Fitzgerald, New York.	591 75
D. N. Fletcher, Florida	22 00
A. Fowler, New Hampshire	19 20
H. Fitch, Arkansas	7 05
W. Frothingham, New York.	47 35
J. C. Finnell, Kentucky	103 00
J. L. Fairchild, New York	505 50
E. F. Friedel, Arkansas	16 75
R. S. Friend, Kentucky	639 95
J. H. Finks, Texas	79 00
C. B. Faris, Kentucky	307 10
W. Flanagan, Texas	38 40
W. J. Folsom, Tennessee	103 40
W. L. Foster, New Hampshire	66 25
J. C. Givens, New Mexico	70 75
F. W. Giraud, Texas	184 75
L. H. Gage, Michigan	13 10
W. W. Gilbert, New York	1,411 70
B. Gildersleeve, Virginia	339 90
G. N. Guthrie, Tennessee	108 05
T. M. Gardner, North Carolina	54 75
W. E. Guerin, Ohio	126 15
T. Griffith, New York	244 30
J. Graves, Michigan	387 20
R. Gardner, Alabama	276 85
E. L. Gregory, Tennessee	12 75
F. W. Gregg, Arizona	397 25
A. B. Gelly, New York	203 60
L. Greene, North Carolina	64 80
R. L. Goodrich, Arkansas	192 00
C. Gibbons, jr., Pennsylvania	85 15
A. M. Gudger, North Carolina	122 70
A. D. Grant, Kansas	54 45
W. K. Gould, Minnesota	126 30
J. W. Green, Tennessee	214 45
E. Gallagher, Virginia	32 20
P. Glessner, Montana	21 30
A. B. Guphill, Dakota	424 30
F. W. Grant, Pennsylvania	33 10
W. J. Gaudin, Tennessee	22 20
A. B. Graves, Tennessee	131 25
W. J. Gayer, South Carolina.	364 20
O. J. Hart, jr., South Carolina	15 90
A. Hess, New York	106 25
J. S. Harbour, Virginia	794 40
Carried forward	34,152 15

Fees of commissioners, United States courts, 1884—Continued.	
Brought forward	$34,152 15
To E. Higbee, Missouri	7 60
J. G. Herschbeck, New York	222 20
S. Hoffman, California	23 15
F. Hempstead, Arkansas	338 60
C. B. Hinsdell, Michigan	189 60
A. Hall, Ohio	232 90
H. A. Harmon, Vermont	12 20
P. A. Hoyne, Illinois	708 90
J. D. Husbands, New York	79 15
A. Hazeltine, New York	307 20
W. H. Hackett, New Hampshire	37 20
J. R. Haskins, Georgia	1,017 55
H. L. Hallett, Massachusetts.	3,187 35
A. W. Hoffman, Georgia	369 35
M. E. Hutchinson, South Carolina	790 50
J. G. Hawthorne, South Carolina	1,230 65
J. H. Heyward, South Carolina	531 50
B. F. Hallowell, Arkansas	27 50
J. C. Harper, Ohio	243 90
W. H. Hurter, Alabama	74 05
H. M. Hinsdell, Michigan	7 60
H. Hanson, Tennessee	1,319 15
C. G. Hubbard, Nevada	26 10
E. M. Hunt, Louisiana.	530 21
E. W. Hendricks, California.	18 60
W. W. Hughey, Arkansas	48 10
D. H. Haynes, Tennessee	5 00
F. Harden, North Carolina	13 95
S. Henry, North Carolina	96 55
E. B. Harrison, Arkansas	483 50
W. Herndon, Kentucky	3 80
A. Hobbs, Iowa	536 20
C. S. Hall, New York	59 50
G. W. Henderson, Texas	55 85
T. J. Hughes, Georgia	121 70
E. E. Hoskins, Michigan	29 20
J. S. Harvee, Virginia	121 00
G. Hahn, Pennsylvania	82 65
J. F. Hurst, Alabama	155 15
S. P. Hale, Tennessee	13 95
O. J. Hart, jr., South Carolina	71 85
F. Ives, Minnesota	34 95
J. D. Jordan, Iowa	195 95
H. L. Jeffers, Alabama	641 60
McL. Jones, Missouri	668 90
J. E. Johnston, Tennessee	151 50
W. H. Johnson, Iowa	180 95
C. Justice, North Carolina	14 30
M. J. Julian, Tennessee	113 95
A. W. Jones, Ohio	11 75
A. Jordan, Tennessee	60 25
M. Key, Iowa	540 05
J. T. Knox, Texas	40 65
E. Q. Keasby, New Jersey	52 40
R. Kennedy, Tennessee	181 35
J. W. Kennedy, Texas	42 00
G. C. Kennedy, Ohio	85 75
M. Kirkpatrick, Pennsylvania	19 60
J. M. Landon, New York	615 05
W. A. Lewis, Tennessee	8 85
H. T. Lee, California	545 10
W. B. Lurty, Virginia	14 70
J. W. Lacey, Texas	142 35
E. J. Leech, Iowa	575 00
J. O. Ladd, South Carolina	424 15
W. E. Lathey, Kansas	40 10
R. H. Lamson, Oregon	196 25
E. E. Lewis, Iowa	298 10
H. W. Long, Missouri	34 75
E. O. Locke, Florida	79 10
W. G. Lane, Louisiana	189 90
H. R. Lovell, Michigan	37 60
M. A. Lewis, Tennessee	75 85
H. B. Lindsey, Tennessee	43 00
J. J. Landes, Kentucky	9 30
L. D. Lavy, Texas	40 80
Carried forward	53,988 66

Fees of commissioners, United States courts, 1884—Continued.	
Brought forward	$53,988 66
To J. A. Lancaster, North Carolina	56 55
G. O. Linbarger, Arkansas	60 40
J. P. Ludlow, Washington Territory	6 20
L. M. Loewenburg, Mississippi	13 40
W. G. Mathes, Tennessee	94 70
J. A. Murray, New York	990 30
J. W. Morgan, New Jersey	317 75
S. C. McCandless, Pennsylvania	182 40
W. Morgan, Missouri	356 20
J. M. McCormick, Texas	384 50
C. W. Mead, New York	525 45
H. B. McAlister, Arkansas	17 75
R. J. MacDonald, Michigan	114 00
F. D. Mead, Michigan	66 35
E. A. McCampbell, Texas	39 90
A. R. Meek, Florida	298 70
M. McDonough, New York	447 90
C. Martindale, Indiana	121 20
A. C. Merrick, South Carolina	45 20
J. D. McHenry, Kentucky	7 80
A. W. McCullough, Alabama	461 25
J. C. Moore, District of Columbia	988 48
H. C. McWharton, West Virginia	81 95
W. A. Mills, Missouri	22 35
S. A. Morgan, Tennessee	284 10
E. E. Marvin, Connecticut	30 30
H. J. Milligan, Indiana	49 90
D. S. McMasters, New York	44 90
J. W. McMath, Michigan	15 80
W. A. McTeer, Tennessee	26 80
G. McHenderson, Tennessee	165 25
J. Mefford, Tennessee	126 95
G. W. Morris, Virginia	6 90
W. G. B. Morris, North Carolina	68 90
C. S. Mereness, New York	21 10
W. Muirhead, New York	91 45
A. V. McAloay, Michigan	8 40
J. W. Mix, Pennsylvania	64 35
S. A. MacAllister, Delaware	13 55
J. Morrison, Tennessee	8 75
W. S. McCullough, Arkansas	29 80
W. D. McKinstrey, Alabama	30 00
W. N. Mason, New York	26 10
C. A. Marston, Alabama	26 90
E. H. McQuigg, Washington, D. C	13 65
J. H. Meeker, New Jersey	16 60
J. H. Neil, Tennessee	140 85
A. J. Northrup, New York	56 10
G. C. Neil, North Carolina	576 30
L. Neal, Kansas	29 45
J. A. Nilson, Kansas	33 70
S. B. Noe, Tennessee	85 30
C. W. Nottingham, Michigan	62 45
E. L. Norton, Kansas	11 00
G. L. Ogden, Tennessee	453 95
J. A. Osborn, New York	393 00
R. G. O'Brien, Washington Territory	18 20
J. E. Pound, New York	632 70
C. J. Pride, South Carolina	71 15
F. W. Perkins, Missouri	521 85
J. W. Payne, North Carolina	116 15
A. J. Perdue, Alabama	1,140 75
G. B. Patterson, Virginia	9 40
G. Paschal, Texas	60 45
H. R. Probasco, Ohio	119 75
S. T. Poinier, South Carolina	622 25
W. Paterson, New Jersey	52 05
W. A. Parker, Alabama	85 93
T. R. Purnell, North Carolina	16 75
J. T. Patterson, North Carolina	481 20
H. J. Peck, Wisconsin	17 55
M. F. Pleasants, Virginia	68 25
Carried forward	66,736 27

Fees of commissioners, United States courts, 1884—Continued.	
Brought forward	$66,736 27
To H. Phillips, jr., Pennsylvania	201 10
J. T. Platt, Connecticut	9 40
S. Patterson, Virginia	25 45
J. R. Paryear, Kentucky	58 40
B. Powell, West Virginia	55 95
C. W. Porter, Vermont	17 50
L. G. Pirkle, Georgia	268 40
R. C. Palmer, Iowa	60 00
J. Parks, Tennessee	18 45
D. E. Perry, North Carolina	85 35
J. Pender, North Carolina	91 40
W. S. Peniston, Nebraska	17 15
W. P. Parker, Alabama	138 25
J. A. Quintero, Louisiana	337 65
E. M. Rand, Maine	650 10
W. C. Robards, Texas	1 55
B. M. Ricketts, Tennessee	23 50
J. Ricketts, Texas	406 45
R. L. Rogers, Maryland	1,163 30
G. S. Richardson, Kansas	163 65
C. T. Rogers, North Carolina	135 05
M. Reed, Wisconsin	24 10
C. P. Redmond, Arkansas	14 30
M. T. Roberts, Kentucky	307 80
J. P. Rader, Tennessee	409 40
G. Ruggles, Texas	86 40
J. P. Rogers, Tennessee	92 60
P. Ravesies, Alabama	1,197 80
A. L. Roadamour, Ohio	35 55
L. Rowe, New Jersey	32 15
G. F. Ratliff, West Virginia	63 75
W. D. Rainey, South Carolina	32 25
N. P. Richards, Colorado	48 92
R. A. Scott, Virginia	7 80
W. Seawell, Alabama	82 45
A. C. Scott, Missouri	44 40
A. Small, Maryland	125 30
N. B. Sylvester, New York	369 35
H. K. Slover, Tennessee	394 00
L. S. B. Sawyer, California	995 30
J. W. Smith, South Carolina	279 30
J. F. Shearman, Kansas	905 56
J. P. Shaw, Ohio	38 35
B. C. Sims, Mississippi	5 00
J. A. Shields, New York	764 30
W. C. Smith, Georgia	892 13
E. H. Smith, New Mexico	28 35
J. T. Spann, Texas	200 15
T. A. B. Staggers, West Virginia	50 85
J. W. Scott, Wisconsin	551 45
L. M. Soper, New York	42 60
A. Sambola, Louisiana	75 30
J. L. Storey, Oregon	17 75
W. E. Singleton, Texas	32 40
W. B. Smith, Nebraska	479 60
J. W. Shook, North Carolina	693 90
T. S. Spates, West Virginia	38 90
F. M. Stewart, Wisconsin	259 10
G. A. Scroggs, New York	81 30
E. Shaw, Pennsylvania	23 50
A. P. Selby, Missouri	57 70
B. L. Stine, Kansas	9 65
F. J. Staley, Arkansas	14 00
A. T. Sumney, North Carolina	428 00
G. Smith, Michigan	85 95
L. P. Seay, Mississippi	6 65
E. M. Seabrook, South Carolina	9 75
C. W. Seymour, Nebraska	24 50
J. M. Stafford, North Carolina	441 70
J. T. Sergeant, North Carolina	9 40
A. L. Schock, Colorado	9 35
J. T. Spencer, Nebraska	18 35
G. Stoll, Kentucky	17 15
J. M. Stewart, Missouri	26 50
J. C. Strong, New York	85 05
H. S. Skaats, Alabama	456 40
Carried forward	82,187 83

1883–'84. JUDICIARY—CUSTOMS.

Fees of commissioners, United States courts, 1884—Continued.		
Brought forward	$82,187	83
To W. S. Strawm, Iowa	60	25
P. Smith, Ohio	12	00
J. B. Slatterly, Louisiana	61	80
J. Snow, Michigan	24	95
E. D. Stamford, North Carolina	61	05
W. A. Sober, Pennsylvania	57	25
J. W. Stumph, Tennessee	55	65
T. Sibley	11	35
W. B. Taft, Texas	58	35
J. M. Tunney, Kansas	79	75
E. R. Tarver, Texas	168	80
F. P. Tustin, Oregon	433	45
S. Thompson, Alabama	368	65
H. S. Thompson, Tennessee	403	15
G. J. Thompson, West Virginia	206	25
W. R. Thompson, West Virginia	15	95
J. A. Thom, North Carolina	90	50
J. W. Tuttle, Kentucky	12	40
J. H. Tuisley, Kentucky	443	50
J. S. Thornley, South Carolina	356	70
J. C. Tipton, Tennessee	81	25
N. W. Tumble, Alabama	11	80
W. Tate, Florida	38	00
A. E. Taylor, Dakota	50	55
W. E. Thompson, North Carolina	160	55
W. A. Van Buren, Indiana	9	95
W. K. White, Iowa	34	40
J. W. Webster, Colorado	279	30
B. White, Ohio	359	50
S. Wheeler, Arkansas	2,601	10
A. Winslow, Texas	177	25
J. W. Wartman, Indiana	142	80
C. L. Ware, Kansas	32	70
W. C. Wells, Alabama	654	13
A. D. Williams, North Carolina	34	00
G. P. Waldron, Dakota	16	00
J. C. Wilson, Kansas	77	10
E. Wallace, North Carolina	113	85
L. H. Webb, Kansas	46	00
Carried forward	90,089	81

Fees of commissioners, United States courts, 1884—Continued.		
Brought forward	$90,089	81
To S. M. Walker, Georgia	355	50
A. B. Wilson, Tennessee	98	55
S. Williams, Tennessee	190	05
J. H. Wallace, Alabama	729	55
M. J. Wilson, Pennsylvania	72	30
G. W. Wakefield, Iowa	23	55
B. Wilson, Georgia	232	55
J. W. Watts, Alabama	51	70
E. Waters, Tennessee	23	40
S. S. Willard, New York	8	00
L. R. J. Wolfe, Pennsylvania	40	50
D. Wright, Pennsylvania	53	35
J. Whitehead, New Jersey	80	25
	92,049	06
Payment of special deputy marshals at Congressional elections, 1881, and prior years:		
To J. A. Beckett	5	00
H. Bergdorf	5	00
C. J. Darrah	15	00
G. W. Jaquins	15	00
A. Jones	5	00
J. Kerrigan	5	00
H. Kyle	5	00
E. Lucas	5	00
M. Monohan	5	00
T. Malloy	5	00
S. Spencer	5	00
J. G. Schleier	5	00
J. Vickers	5	00
C. Winrick	5	00
	90	00
Deduct from repayments:		
By J. B. Erhardt	$3,440	00
R. S. Foster	363	00
R. P. Hughes	60	00
J. N. Kerns	410	00
J. M. McClintock	360	00
J. C. Ullery	25	00
	4,658	00
Excess of repayments	4,568	00

CUSTOMS.

Collecting revenue from customs:		
To E. A. Bragdon, collector, York, Me	$207	50
A. A. Burleigh, collector, Aroostook, Me	8,599	00
I. M. Boardman, collector, Belfast, Me	1,534	00
W. C. Marshall, collector, Belfast, Me	2,781	00
F. N. Dow, collector, Portland, Me	80,064	32
L. M. Morrill, collector, Portland, Me	166	67
D. F. Davis, collector, Bangor, Me	12,989	68
J. S. Smith, collector, Bangor, Me	449	05
W. M. Haycock, collector, Passamaquoddy, Me	5,033	72
N. B. Nutt, collector, Passamaquoddy, Me	10,891	00
J. D. Hopkins, collector, Frenchman's Bay, Me	4,758	00
H. A. Kennedy, collector, Waldoborough, Me	3,464	00
I. Lord, collector, Saco, Me	833	00
Carried forward	131,770	94

Collecting revenue from customs—Continued.		
Brought forward	$131,770	94
To G. Leavitt, collector, Machias, Me	141	55
J. L. Pierce, collector, Machias, Me	3,021	00
W. H. Sargent, collector, Castine, Me	4,873	00
J. W. Sergent, collector, Kennebunk, Me	736	36
G. B. Sawyer, collector, Wiscasset, Me	3,687	00
J. W. Wakefield, collector, Bath, Me	8,758	00
A. F. Howard, collector, Portsmouth, N. H	10,163	00
W. Wells, collector, Vermont, Vt	76,683	00
J. A. P. Allen, collector, New Bedford, Mass	5,721	00
J. Brady, jr., collector, Fall River, Mass	3,804	00
F. J. Babson, collector, Gloucester, Mass	11,731	00
S. H. Doten, collector, Plymouth, Mass	2,922	91
Carried forward	264,012	76

Collecting revenue from customs—Continued.	
Brought forward	$264,012 76
To R. Worthington, collector, Boston, Mass	721,652 63
F. B. Goss, collector, Barnstable, Mass	6,942 00
A. A. Gardner, collector, Nantucket, Mass	533 51
W. P. Hiller, collector, Nantucket, Mass	306 91
W. H. Huse, collector, Newburyport, Mass	2,519 00
C. B. Marchant, collector, Edgartown, Mass	3,628 00
C. H. Odell, collector, Salem, Mass	6,981 45
F. A. Osgood, collector, Marblehead, Mass	1,186 00
S. Dodge, collector, Marblehead, Mass	1,192 00
J. H. Cozzens, collector, Newport, R. I	3,968 00
J. Collins, collector, Bristol, R. I	1,613 00
C. Harris, collector, Providence, R. I	27,710 00
A. J. Beers, collector, New Haven, Conn	16,772 00
J. S. Hanover, collector, Fairfield, Conn	2,106 00
A. Putnam, collector, Middletown, Conn	5,017 39
J. A. Tibbets, collector, New London, Conn	5,243 00
H. N. Trumbull, collector, Stonington, Conn	1,621 00
W. H. Daniels, collector, Oswegatchie, N. Y	25,318 27
H. L. Jones, collector, Oswegatchie, N. Y	1,680 90
B. Flagler, collector, Niagara, N. Y	53,176 21
C. A. Gould, collector, Buffalo, N. Y	78,782 56
P. P. Kidder, collector, Dunkirk, N. Y	2,774 00
J. J. Lamoree, collector, Oswego, N. Y	54,532 16
J. A Luby, collector, Albany, N. Y	9,055 00
W. Lowen, collector, Sag Harbor, N. Y	1,045 50
S. Moffitt, collector, Champlain, N. Y	26,095 72
C. E. Morris, collector, Genesee, N. Y	27,080 75
W. T. Simpson, collector, Genesee, N. Y	4,880 35
W. H. Robertson, collector, New York, N. Y	2,772,669 24
G. W. Warren, collector, Cape Vincent, N. Y	15,782 53
W. L. Ashmore, collector, Burlington, N. J	245 00
I. S. Adams, collector, Great Egg Harbor, N. J	2,582 00
W. A. Baldwin, collector, Newark, N. J	2,680 00
W. F. Brown, collector, Perth Amboy, N. J	908 70
M. A. Edgar, collector, Perth Amboy, N. J	9,904 14
J. H. Elmore, collector, Bridgeton, N. J	386 00
G. W. Mathis, collector, Little Egg Harbor, N. J	1,277 49
M. R. Barr, collector, Erie, Pa	94 57
H. C. Stafford, collector, Erie, Pa	4,048 65
J. F. Dravo, collector, Pittsburgh, Pa	18,833 00
Carried forward	4,186,837 39

Collecting revenue from customs—Continued.	
Brought forward	$4,186,837 39
To J. F. Hartranft, collector, Philadelphia, Pa	424,699 79
L. Thompson, collector, Delaware, Del	7,111 00
T. Ireland, collector, Annapolis, Md	1,920 63
H. Lawson, collector, Easton, Md	2,820 00
E. H. Webster, collector, Baltimore, Md	293,697 00
J. H. Wilson, collector, Georgetown, D. C	5,292 00
G. E. Bowden, collector, Norfolk, Va	16,384 71
J. D. Bowie, collector, Petersburg, Va	3,339 00
B. C. Cook, collector, Richmond, Va	8,794 25
H. de B. Clay, collector, Yorktown, Va	13,917 10
J. W. Johnston, collector, Yorktown, Va	102 72
J. H. Gray, collector, Alexandria, Va	2,336 00
George Toy, collector, Cherrystone, Va	2,194 00
B. Upton, jr., collector, Tappahannock, Va	772 00
A. H. Beach, collector, Wheeling, W. Va	1,055 00
J. Gilchrist, collector, Wheeling, W. Va	342 06
T. A. Henry, collector, Pamlico, N. C	5,092 00
E. J. Pennypacker, collector, Wilmington, N. C	16,035 00
C. E. Robinson, collector, Albemarle, N. C	3,007 00
A. C. Davis, collector, Beaufort, N. C	5,574 00
G. Holmes, collector, Beaufort, S. C	5,692 08
H. F. Heriot, collector, Georgetown, S. C	1,756 00
T. B. Johnston, collector, Charleston, S. C	18,539 00
H. P. Farrow, collector, Brunswick, Ga	6,752 00
T. F. Johnson, collector, Savannah, Ga	20,220 00
W. G. Pledger, collector, Atlanta, Ga	1,005 00
J. Shepard, collector, Saint Mary's, Ga	1,836 00
J. Hirst, collector, Saint Mark's, Fla	4,833 00
S. M. Sawyer, collector, Appalachicola, Fla	2,605 00
E. Higgins, collector, Saint John's, Fla	3,054 00
J. W. Howell, collector, Fernandina, Fla	4,896 00
J. M. Tarbell, collector, Pensacola, Fla	19,820 00
F. N. Wicker, collector, Key West, Fla	22,247 00
F. E. Witsell, collector, Saint Augustine, Fla	2,290 00
T. F. House, collector, Saint Augustine, Fla	97 11
J. W. Burke, collector, Mobile, Ala	23,039 83
G. W. Henderson, collector, Pearl River, Miss	6,507 74
A. Newberger, collector, Natchez, Miss	521 53
J. W. Short, collector, Vicksburg, Miss	903 00
A. S. Badger, collector, New Orleans, La	236,419 10
Carried forward	5,384,356 04

1883–'84. CUSTOMS.

Collecting revenue from customs—Continued.	
Brought forward	$5,384,356 04
To J. R. Jolley, collector, Teche, La	5,817 83
J. L. Haynes, collector, Brazos de Santiago, Tex	32,962 00
J. O. Luby, collector, Brazos de Santiago, Tex	15,273 00
A. G. Mallory, collector, Galveston, Tex	54,668 00
N. Plato, collector, Corpus Christi, Tex	25,327 00
W. A. Saylor, collector, Paso del Norte, Tex	4,097 00
A. Tibbitts, collector, Paso del Norte, Tex	20,558 00
F. A. Vaughan, collector, Saluria, Tex	19,535 00
T. F. Cassells, collector, Memphis, Tenn	2,485 30
W. J. Smith, collector, Memphis, Tenn	165 00
J. L. Gaston, collector, Chattanooga, Tenn	745 25
J. M. Kercheval, collector, Nashville, Tenn	568 00
A. Woolf, collector, Nashville, Tenn	138 18
J. W. Cobb, collector, Paducah, Ky	202 36
J. K. Faulkner, collector, Louisville, Ky	11,755 00
J. B. Battelle, collector, Miami, Ohio	5,874 00
J. W. Fuller, collector, Miami, Ohio	525 31
G. W. Howe, collector, Cuyahoga, Ohio	16,951 00
D. W. McClung, collector, Cincinnati, Ohio	33,940 00
C. Rude, collector, Sandusky, Ohio	2,383 00
D. V. Bell, collector, Detroit, Mich	31,514 39
W. Livingston, jr., collector, Detroit, Mich	34,805 00
W. Hartsuff, collector, Huron, Mich	29,153 00
J. P. Sanborn, collector, Huron, Mich	2,016 57
D. McLaughlin, collector, Michigan, Mich	8,412 00
C. Y. Osburn, collector, Superior, Mich	9,956 00
J. C. Jewell, collector, Evansville, Ind	1,174 00
J. R. Leonard, collector, Indianapolis, Ind	6,496 00
C. Barner, collector, Galena, Ill	918 00
J. Spalding, collector, Chicago, Ill	148,596 22
George Fisher, collector, Cairo, Ill	1,507 29
W. R. Finch, collector, La Crosse, Wis	1,422 00
A. W. Hall, collector, Milwaukee, Wis	10,685 00
J. Bookwalter, collector, Minnesota, Minn	36,083 00
E. McMurtrie, collector, Minnesota, Minn	940 90
V. Smith, collector, Duluth, Minn	4,735 71
R. Armstrong, collector, Dubuque, Iowa	386 00
D. E. Lyon, collector, Dubuque, Iowa	164 95
George Frazee, collector, Burlington, Iowa	493 09
R. C. Crowell, collector, Kansas City, Mo	3,423 17
Carried forward	5,971,208 56

Collecting revenue from customs—Continued.	
Brought forward	$5,971,208 56
To J. Hunter, collector, Saint Joseph, Mo	2,649 00
C. M. Whitney, collector, Saint Louis, Mo	44,504 60
P. French, collector, Alaska, Alaska	2,232 00
W. G. Morris, collector, Alaska, Alaska	5,138 00
W. H. Hunt, jr., collector, Montana and Idaho	2,207 00
J. C. Montgomery, collector, Denver, Colo	2,529 00
A. W. Bash, collector, Puget Sound, Wash	21,054 00
C. Van Cleve, collector, Yakima, Oreg	2,092 00
I. Hacker, collector, Southern Oregon	151 93
C. B. Watson, collector, Southern Oregon	3,362 00
J. D. Merryman, collector, Oregon, Oreg	10,616 00
F. N. Shurtleff, collector, Williamette, Oreg	41,933 33
J. Campbell, collector, Omaha, Nebr	1,610 00
G. A. Johnson, collector, San Diego, Cal	6,852 35
W. H. Pratt, collector, Humboldt, Cal	4,876 00
J. A. Watson, collector, Humboldt, Cal	2,012 35
E. L. Sullivan, collector, San Francisco, Cal	347,487 00
W. H. Sears, collector, San Francisco, Cal	68,637 00
J. R. Brierly, collector, Wilmington, Cal	12,915 00
J. Atkins	63 30
E. Bill	22 15
G. D. Bisbee	123 32
W. H. Bradley	35 70
D. C. Chadwick	114 86
E. M. Cheney	40 00
J. Devenshire	19 00
C. Dart	6 90
E. H. Eggleston	257 50
W. F. Goodspeed	1,333 96
W. S. Harsha	12 56
H. E. Knox	938 00
J. N. Kerns	819 50
A. H. Leonard	117 50
W. F. Lunt	137 20
E. O. Locke	25 49
J. B. Leake	800 00
R. Mallory	175 00
S. S. Mathews	130 18
G. B. Patterson	15 00
E. Root	6,220 00
C. Richards	450 00
S. P. Sanger	1,000 00
S. R. Smith	25 30
J. Seavey	5 67
P. Teare	1,250 00
R. S. Tuthill	40 00
J. K. Valentine	614 00
P. A. Williams	16 81
J. A. Zabriskie	5 60
Adams Express Company	274 57
Atchison, Topeka and Santa Fé R. R	37 11
Baltimore and Ohio R. R. Co	16 51
Chicago, Milwaukee and Saint Paul R. R	9 31
Chicago, Rock Island and Pacific R. R	29 81
Chicago and Northwestern Rwy	5 95
Clyde Steam Packet Line	40 74
Central Pacific R. R	300 96
Carried forward	6,569,695 98

Collecting revenue from customs—Continued.		
Brought forward	$6,569,695	98
To Kansas Pacific R. R.	51	96
Missouri Pacific R. R.	27	16
Northern Pacific R. R.		64
Oregon Railway and Navigation Company	72	88
Pacific Coast Steamship Co.	10	14
Star Union Line	24	14
Union Pacific R. R	194	38
G. A. Bartlett	126,998	76
Arnold, Constable & Co	51	98
American Sugar Refinery	110	02
E. J. Brooks & Co	6,792	07
H. S. Briggs	109	04
Bernard, Andreas & Co	34	00
A. Badeau	54	55
J. Biess & Co	1,105	00
J. Baird & Sons	92	25
Brigg, Entz & Co	474	54
F. Butterfield & Co	83	87
Boston Sandwich Glass Company	507	44
D. W. Colt	1,500	00
H. N. Camp	1,000	00
Cumberland Telephone and Telegraph Company, Nashville, Tenn	15	00
W. D. Crumbie	6	20
Commercial Advertiser Association	19	80
J. R. Davis	28	00
Evening Post Job Printing Company	30	90
J. M. Fiske	63	36
Fairchild Paper Company, Boston, Mass	768	28
L. S. Friedberger	21	22
J. H. Foote	53	33
E. S. Fowler	25	00
C. C. Fulton & Co	11	25
Florence Manufacturing Company	1,170	69
Fairbanks & Co	5	60
H. H. Goldsborough	42	00
P. F. Herwig	300	00
L. Heyl	1,140	39
H. Herrmann, Sternback & Co	2,490	12
W. H. Horstmann & Sons	59	54
E. Heinemann & Co	128	37
Inter-Ocean Publishing Company	13	07
Geo. Keyes	75	45
L. Kimmel	24	25
G. W. Knox	3	22
W. Loeschigk *et al*	34	00
R. & D. Lamb	60	61
J. S. Long	1,425	13
H. F. Miller	175	44
S. T. Morgan	386	25
T. Murphy	1,000	00
H. B. More	1,193	74
Meyer & Dickinson	3,741	44
L. Manasse	27	86
Pennsylvania Company	43	76
T. C. Power	2	90
L. J. Phillips	1,000	00
Peacock, Featherston & Co	15	30
A. J. Perey	43	70
A. Pollman	53	72
Richard & Co	1,164	22
Rockland Free Press, Maine	2	70
T. G. Rice	65	99
C. E. Riley & Co	76	55
Rowland, Worthington & Co	16	00
E. Sherer	23	70
Scott & Co	149	69
A. T. Stewart & Co	58	04
J. A. Shearer	25	00
L. E. Scrafford & Co	95	62
Carried forward	6,726,367	20

Collecting revenue from customs—Continued.		
Brought forward	$6,726,367	20
To A. B. Theriott	34	00
Treasury Department	28,894	61
The John Shillito Company	50	00
The Morning Herald, Baltimore	14	85
Viti Bros	178	61
W. Van Wart	373	17
A. & E. Wallack	14	35
N. D. Whitney	21	50
W. B. Wells	12	77
R. de Wardner	589	67
J. D. Warren	7	20
P. A. Young	177	90
	6,756,735	83
Deduct repayments:		
By J. B. Battelle, Miami, Ohio	$126	13
A. J. Beers, New Haven, Conn	36	95
J. W. Burke, Mobile, Ala	3,634	05
A. W. Bash, Puget Sound, Wash	2,253	70
G. E. Bowden, Norfolk, Va	56	18
D. V. Bell, Detroit, Mich	1,895	60
A. A. Burleigh, Aroostook, Me	830	55
J. Bookwalter, Minnesota, Minn	159	18
W. F. Brown, Perth Amboy, N. J	90	61
A. S. Badger, New Orleans, La	38	23
J. Collins, Bristol, R. I		12
B. C. Cook, Richmond, Va		03
J. H. Cozzens, Newport, R. I	50	22
J. Campbell, Omaha, Nebr	3	54
D. G. Carr, Petersburg, Va		63
H. de B. Clay, Yorktown, Va	157	02
F. M. Dow, Portland, Me	218	24
W. H. Daniels, Oswegatchie, N. Y	14	19
S. Dodge, Marblehead, Mass	1	11
C. S. English, Georgetown, D. C	10	85
B. Flagler, Niagara, N. Y	446	97
J. K. Faulkner, Louisville, Ky		04
C. A. Gould, Buffalo, N. Y	1,040	32
W. Hartsuff, Huron, Mich	1,506	72
P. Herwig	226	51
J. L. Haynes, Brazos de Santiago	324	95
J. W. Howell, Fernandina, Fla	1	45
J. T. Hartranft, Philadelphia, Pa	1,229	21
W. P. Hiller, Nantucket, Mass	106	04
E. Higgins, Saint John's, Fla	198	87
C. H. Haughton, Perth Amboy, N. J	1,280	88
W. H. Hunt, jr., Montana, Idaho	9	92
Carried forward	15,949 01	6,756,735 83

Collecting revenue from customs—Continued.		
Deduct repayments:		
Brought forward	$15,949 01	$6,756,735 83
By W. M. Haycock, Passamaquoddy, Me	3 88	
J. Hirst, Saint Mark's Fla	225 14	
T. F. Johnson, Savannah, Ga	90 12	
T. B. Johnston, Charleston, S. C	15 00	
S. M. Johnson, Corpus Christi, Tex	15 57	
P. P. Kidder, Dunkirk, N. Y	86	
J. J. Lamores, Oswego, N. Y	20 90	
W. Livingston, jr., Detroit, Mich	1,526 84	
J. A. Luby, Albany, N. Y	1 60	
A. G. Malloy, Cincinnati, Ohio	90 62	
C. E. Morris, Genesee, N. Y	1,034 23	
S. Moffitt, Champlain, N. Y	39 99	
J. D. Merryman, Oregon, Oreg	76 92	
D. W. McClung, Cincinnati, Ohio	19 61	
A. Newburger, Natchez, Miss	25	
N. B. Nutt, Passamaquoddy, Me	190 42	
W. D. Nolen, Delaware, Del	27 18	
C. H. Odell, Salem, Mass	25 17	
N. Plato, Corpus Christi, Tex	4 51	
W. H. Robertson, New York, N. Y	441 58	
J. Spalding, Chicago, Ill	10,090 44	
F. N. Shurtleff, Oregon, Oreg	6,198 08	
E. L. Sullivan, San Francisco, Cal	1,216 75	
J. P. Sanborn, Huron, Mich	2 13	
W. T. Simpson, Genesee, N. Y	59 52	
J. W. Short, Vicksburg, Miss	90 20	
H. C. Stafford, Erie, Pa	52	
V. Smith, Duluth, Minn	55	
W. H. Sears, San Francisco, Cal	08	
J. A. Tibbits, New London, Conn	4 42	
J. M. Tarbell, Pensacola, Fla	2,947 67	
Treasurer U. S	1,193 74	
Treasury Department	728 00	
F. A. Vaughan, Saluria, Tex	129 00	
W. Wells, Vermont, Vt	740 67	
E. H. Webster, Baltimore, Md	12 08	
G. W. Warren, Cape Vincent, N. Y	1,718 76	
R. Worthington, Boston, Mass	78 70	
F. N. Wicker, Key West, Fla	2,239 36	
		47,250 07
		6,709,485 76

Expenses Revenue-Cutter Service, 1881 and prior years:		
By W. G. Henderson	$320 09	
Expenses Revenue-Cutter Service, 1882:		
To Chicago, Rock Island and Pacific Railroad Company		$0 31
W. G. Henderson		153 65
A. G. Malloy		9 35
		163 31
Deduct from repayments:		
By J. W. Burke	$4 92	
Treasury Dep't	25,000	
		25,004 92
Excess of repayments		24,841 61
Expenses Revenue-Cutter Service, 1883:		
To Alaska Commercial Company		21 72
N. R. Barr		20 00
C. H. Bass		2,460 00
A. W. Bash		15 74
G. E. Bowden		50
J. W. Burke		297 06
G. A. Bartlett		5,000 00
J. H. Cozzens		70 43
Central Pacific R. R		602 82
W. H. Daniels		110 00
A. W. Hall		90 17
J. Hirst		83 62
J. F. Hartranft		3,471 54
W. M. Haycock		76 31
J. A. Henriques		3 02
T. A. Henry		24 31
T. B. Johnston		170 28
R. M. Joyce		62 00
J. J. Lamoree		123 60
A. G. Mallay		31 95
Malster & Reaney		9,666 00
R. Merrills Sons		18 00
Navy Department		64 26
E. J. Pennypacker		269 13
T. O. Pierce & Co		16 25
Pacific Coast Steamship Company		24 98
J. Rosenfield		19,500 00
J. F. Rosseell		25 00
W. H. Robertson		664 67
C. Reeder & Sons		10,815 00
J. Spalding		157 60
W. H. Sargent		15 50
T. Smith & Bro		8,940 00
Slater & Reid		9,650 00
Treasury Department		1,141 36
Union Pacific R. R		768 91
F. N. Wicker		218 89
W. Wright		8,921 00
		83,611 62
Deduct repayments:		
By G. A. Bartlett	$70,050 00	
M. R. Barr	2 07	
J. W. Burke	927 13	
A. W. Bash	219 32	
J. H. Cozzens	294 03	
W. H. Daniels	114 24	
F. N. Dow	170 53	
J. F. Hartranft	17 66	
G. W. Henderson	391 52	
W. M. Haycock	7 52	
T. F. Johnson	119 88	
T. B. Johnston	76	
H. A. Kennedy	8 67	
J. J. Lamoree	273 30	
W. C. Marshall	8 12	
A. G. Mallay	501 28	
D. McLaughlin	11 02	
E. J. Pennypacker	19 00	
G. R. Slicer	500 00	
E. L. Sullivan	1,214 08	
Carried forward	74,850 13	83,611 62

Expenses Revenue-Cutter Service, 1883—Continued.		
Deduct repayments:		
Brought forward	$74,850 13	$83,611 62
By J. M. Tarbell	171 13	
Treasury Department	4,087 24	
R. Worthington	1,261 55	
E. H. Webster	438 12	
F. N. Wicker	2 10	
		80,810 27
		2,801 35
Expenses Revenue Cutter Service, 1884:		
To J. A. P. Allen		25,756 64
American Ship Windlass Company		500 00
A. J. Beers		125 00
M. R. Barr		2,353 06
G. A. Bartlett		105,000 00
G. E. Bowden		16,313 65
D. V. Bell		9,942 74
A. W. Bash		26,317 07
J. W. Burke		37,227 75
A. S. Badger		97 01
F. Barr		11 81
Building or purchase revenue vessels		7 50
J. H. Cozzens		27,299 63
H. de B. Clay		1,411 15
Central Pacific R. R		225 68
Downing & Lawrence		6,930 91
W. H. Daniels		5,836 37
F. N. Dow		39,124 30
S. H. Doten		960 00
C. H. De Lamater & Co		3,305 58
G. Flavel		135 00
C. A. Gould		175 00
Gilmore, Meredith & Co		4,582 00
Gaahn & Bassett		8 05
A. W. Hall		21,641 14
T. A. Henry		21,006 14
W. M. Haycock		2,229 65
W. G. Henderson		22,382 44
Holland & Thomson		11 00
C. Harris		200 00
A. F. Howard		933 85
J. Hirst		2,662 52
J. F. Hartranft		32,311 39
T. B. Johnston		26,077 32
T. F. Johnson		31,493 03
R. M. Joyce		2 00
W. Lowen		960 00
W. Livingston, jr		7,685 48
J. J. Lamoree		12,739 24
A. G. Mallay		26,347 97
C. B. Marchant		2,130 15
R. Merrills' Sons		100 70
N. B. Nutt		20,347 85
O. M. and D. W. Nash		117 50
E. J. Pennypacker		31,568 45
A. Putnam		600 00
W. H. Robertson		101,502 42
J. F. Rosseel		25 00
C. Reeder & Sons		6,002 50
E. L. Sullivan		70,626 73
G. R. Slicer		500 00
J. Spalding		5,358 24
H. C. Stafford		6,514 08
Slater & Ried		1,070 20
W. H. Sears		12,885 08
L. Thompson		1,824 14
Treasury Department		1,118 00
J. M. Tarbell		174 73
Union Pacific R. R		300 03
J. H. Wilson		1,307 00
F. N. Wicker		8,109 98
E. H. Webster		41,916 70
R. Worthington		40,956 84
W. Wright		3,049 26
War Department		211 60
Carried forward		880,646 25

Expenses Revenue-Cutter Service, 1884—Continued.		
Brought forward		$880,646 25
Deduct repayments:		
By M. R. Barr	$136 90	
G. E. Bowden	37 00	
D. V. Bell	882 59	
J. W. Burke	292 14	
J. H. Cozzens	160 51	
H. de B. Clay	1,411 15	
W. M. Haycock	28 34	
A. W. Hall	56 20	
J. F. Hartranft	7 50	
H. A. Kennedy	35 35	
A. G. Mallay	15 93	
N. B. Nutt	198 25	
E. J. Pennypacker	9 25	
W. H. Robertson	40 91	
L. G. Shepard	52 40	
J. Spalding	12 08	
H. C. Stafford	46 40	
E. L. Sullivan	1,793 48	
Treasury Department	1,185 35	
R. Worthington	372 39	
F. N. Wickler	199 92	
		6,974 04
		873,672 21
Supplies of light-houses, 1881 and prior years:		
By G. W. Coffin	$31 61	
Supplies of light-houses, 1882:		
To G. Brown		54 00
Baltimore and Ohio R. R		44
J. C. Watson		1 24
		55 68
Supplies of light-houses, 1883:		
To G. Brown		34 20
F. W. Belz		22 78
Chicago, Rock Island and Pacific R. R		137 85
Central Pacific R. R		273 33
J. C. Duane		4,100 00
Oregon R. R. and Navigation Company		59 22
Treasury Department		1 82
Union Pacific R. R. Company		371 33
		5,000 53
Deduct from repayments:		
By G. Brown	$4,963 35	
G. W. Coffin	250 76	
G. T. Davis	404 58	
B. F. Day	112 25	
J. C. Duane	281 03	
C. E. L. B. Davis	866 14	
A. D. Evans	1,117 11	
G. W. Hayward	396 85	
M. Miller	14 62	
H. F. Picking	66	
F. Rogers	23 96	
W. S. Schley	346 61	
Treasury Department	13,097 83	
J. K. Winn	136 50	
J. C. Watson	418 10	
		22,430 35
Excess of repayments		17,429 82
Supplies of light-houses, 1884:		
To G. Brown		166,718 62
F. W. Belz		5 86
A. S. Crowninshield		5,447 06
G. W. Coffin		28,616 92
F. A. Cook		11,249 62
Central Pacific R.R. Company		12 81
Carried forward		212,050 89

1883–'84. CUSTOMS.

Supplies of light-houses, 1884—Continued.		
Brought forward		$212,050 89
To Chicago, Rock Island and Pacific R. R		2 47
G. T. Davis		48,300 00
J. C. Duane		34,000 00
B. F. Day		3,053 14
C. E. L. B. Davis		850 00
N. M. Dwyer		9,662 00
R. D. Evans		13,414 79
G. W. Hayward		2,500 00
M. Miller		11,032 52
Northern Pacific R. R		86
Oregon Railway and Navigation Company		8 59
H. F. Picking		1,700 00
J. W. Philip		20,308 50
F. Rogers		1,256 25
W. S. Schley		1,800 00
Treasury Department		1,054 18
Union Pacific R. R		13 50
J. K. Winn		3,315 00
J. C. Watson		7,405 00
G. H. Wadleigh		8,550 00
G. B. White		4,968 75
G. F. F. Wilde		9,012 00
		394,258 44
Deduct repayments:		
By G. W. Coffin	$1,189 90	
G. T. Davis	11,034 00	
G. W. Hayward	224 82	
T. Rogers	582 62	
W. S. Schley	411 19	
Treasury Department	14,345 78	
J. C. Watson	92 07	
J. K. Winn	386 47	
		28,266 85
		365,991 59
Repairs and incidental expenses of light-houses, 1881 and prior years:		
By W. A. Jones	$11 66	
Repairs and incidental expenses of light-houses, 1882:		
By G. Weitzel	$688 17	
Repairs and incidental expenses of light-houses, 1883:		
To Chicago, Rock Island and Pacific R. R		8 57
Central Pacific R. R. Company		13 82
J. C. Duane		15,000 00
Empire Line		9 52
D. P. Heap		10 00
C. F. Powell		90 00
W. F. Raynolds		4,000 00
Treasury Department		21 95
Union Pacific R. R		20 90
G. Weitzel		688 17
		19,862 93
Deduct repayments:		
By O. E. Babcock	$442 31	
C. E. L. B. Davis	2,278 89	
J. C. Duane	2,763 96	
D. P. Heap	37 10	
C. F. Powell	47 86	
A. H. Payson	25 24	
W. F. Raynolds	445 84	
		6,041 20
		13,821 73
Repairs and incidental expenses of light-houses, 1884:		
To O. E. Babcock		72,000 00
Central Pacific R. R. Company		3 68
Carried forward		72,003 68

Repairs and incidental expenses of light-houses, 1884—Continued.		
Brought forward		$72,003 68
To Chicago, Rock Island and Pacific R. R		77
C. E. L. B. Davis		58,200 00
J. C. Duane		55,000 00
W. H. Heuer		32,505 71
D. P. Heap		1,000 00
J. C. Mallery		22,668 92
C. F. Powell		8,000 00
A. H. Payson		12,000 00
C. W. Raymond		22,153 75
W. F. Raynolds		10,000 00
Pennsylvania Company		82
J. A. Smith		16,027 29
Treasury Department		666 99
T. Turtle		19,928 95
Union Pacific R. R. Company		7 48
		330,164 36
Deduct repayments:		
By O. E. Babcock	$16,027 29	
W. H. Heuer	1,018 06	
C. W. Raymond	10,823 57	
W. F. Raynolds	2,536 40	
		30,405 32
		299,759 04
Salaries of keepers of light-houses, 1882:		
To J. C. Watson		10 50
Salaries of keepers of light-houses, 1883:		
To B. F. Day		10 81
Deduct from repayments:		
By G. Brown	$444 42	
A. S. Crowninshield	1,436 31	
G. W. Coffin	26 94	
G. T. Davis	147 58	
B. F. Day	91 94	
A. D. Evans	3,719 21	
R. D. Evans	1 48	
M. Miller	31 61	
F. Rodgers	79 13	
W. S. Schley	589 37	
J. C. Watson	2,683 94	
		9,253 93
Excess of repayments		9,243 12
Salaries, keepers of light-houses, 1884:		
To G. Brown		87,800 00
A. S. Crowninshield		44,947 19
G. W. Coffin		28,825 00
F. A. Cook		69,310 00
G. T. Davis		29,534 00
B. F. Day		39,042 80
N. M. Dyer		22,325 00
R. D. Evans		76,194 09
G. W. Hayward		7,140 00
M. Miller		32,073 15
J. W. Philips		10,612 50
F. Rogers		8,522 50
W. S. Schley		11,000 00
J. K. Winn		14,000 50
J. C. Watson		24,239 64
G. H. Wadleigh		31,625 00
G. B. White		24,863 43
G. F. F. Wilde		13,762 06
		575,816 86
Deduct repayments:		
By G. W. Coffin	$152 48	
G. T. Davis	5,500 00	
A. D. Evans	50	
G. W. Hayward	394 80	
F. Rogers	621 94	
W. S. Schley	384 68	
Carried forward	7,054 40	575,816 86

Salaries keepers of light-houses, 1884 -Continued.		
Deduct repayments:		
Brought forward	$7,054 40	$575,816 86
By J. C. Watson	3,683 28	
J. K. Winn	60 00	
		10,797 68
		565,019 18
Inspecting lights, 1883:		
By D. P. Heap	$33 60	
H. F. Picking	442 15	
	475 75	
Inspecting lights, 1884:		
To D. P. Heap		1,000 00
H. F. Picking		2,000 00
		3,000 00
Expenses of light-vessels, 1883:		
To G. Brown		23 40
J. C. Duane		2,000 00
B. F. Day		22 58
F. Rogers		3,000 00
Treasury Department		63 50
G. H. Wadleigh		13,000 00
		18,109 48
Deduct repayments:		
By G. Brown	$3,679 94	
B. F. Day	105 16	
J. C. Duane	20 06	
M. Miller	5	
F. Rogers	2,945 34	
W. S. Schley	3,557 43	
		10,307 98
		7,801 50
Expenses of light-vessels, 1884:		
To G. Brown		35,860 00
J. C. Duane		9,400 00
B. F. Day		10,558 56
M. Miller		19,932 94
F. Rogers		6,427 72
W. S. Schley		25,000 00
G. H. Wadleigh		65,690 00
G. B. White		29,752 16
		202,621 38
Deduct repayments:		
By F. Rogers	$444 52	
W. S. Schley	3,347 54	
		3,792 06
		198,829 32
Expenses of fog-signals, 1882:		
By G. Weitzel	$92 49	
Expenses of fog-signals, 1883:		
To Chicago, Rock Island and Pacific R. R.		5 91
Central Pacific R. R.		32 24
J. C. Duane		1,000 00
Erie and North Shore Dispatch		8 91
S. C. Mallery		507 87
A. H. Payson		18 80
F. Rodgers		77 14
Union Pacific R. R.		42 34
G. Wetzel		92 49
		1,785 70
Deduct from repayments:		
By O. E. Babcock	$731 32	
C. E. L. B. Davis	809 99	
D. P. Heap	100 00	
C. F. Powell	6 58	
W. F. Raynolds	1,691 06	
C. W Raymond	507 87	
		3,846 82
Excess of repayments		2,061 12

Expenses of fog-signals, 1884:		
To O. E. Babcock		$3,000 00
C. E. L. B. Davis		15,400 00
J. C. Duane		15,000 00
W. H. Heuer		500 00
J. C. Mallery		10,044 86
C. F. Powell		1,310 00
A. H. Payson		4,000 00
C. W. Raymond		2,600 00
W. F. Raynolds		100 00
J. A. Smith		2,742 16
		54,697 02
Deduct repayments:		
By E. O. Babcock	$2,742 16	
C. W. Raymond	867 06	
W. F. Raynolds	100 00	
		3,709 22
		50,987 80
Expenses of buoyage, 1882:		
To G. Brown		22 80
R. D. Evans		1 88
F. J. Higginson		20
G. F. F. Wilde		28 80
		53 68
Expenses of buoyage, 1883:		
To G. Brown		21 60
A. S. Crowninshield		16 91
F. A. Cook		4 00
R. D. Evans		24 19
J. C. Mallery		261 98
H. F. Picking		27 90
F. Rogers		4,022 00
Treasury Department		114 63
G. B. White		2,910 00
G. H. Wadleigh		1,600 00
		9,003 21
Deduct from repayments:		
By G. W. Coffin	$21 00	
G. T. Davis	275 56	
B. F. Day	606 27	
J. C. Duane	14	
G. W. Hayward	185 60	
M. Miller	1 32	
F. Rogers	2,914 59	
C. W. Raymond	261 98	
W. S. Schley	4,329 06	
J. C. Watson	333 37	
J. K. Winn	100 00	
G. H. Wadleigh	52 91	
		9,081 80
Excess of repayments		78 59
Expenses of buoyage, 1884:		
To G. Brown		55,732 00
O. E. Babcock		5,500 00
A. S. Crowninshield		26,721 37
G. W. Coffin		7,780 66
F. A. Cook		13,849 15
G. T. Davis		17,500 00
J. C. Duane		18,000 00
B. F. Day		22,902 00
N. M. Dyer		6,685 00
R. D. Evans		47,042 45
G. W. Hayward		3,000 00
M. Miller		13,140 00
J. C. Mallery		2,558 60
C. F. Powell		485 00
H. F. Picking		500 00
J. W. Philip		4,487 14
C. W. Raymond		4,000 00
F. Rogers		4,404 28
W. S. Schley		10,000 00
J. A. Smith		3,078 82
J. K. Winn		4,600 00
J. C. Watson		2,018 75
G. H. Wadleigh		20,000 00
Carried forward		293,985 22

Expenses of buoyage, 1884—Continued.		
Brought forward		$293,985 22
To G. B. White		22,812 84
G. F. F. Wilde		8,051 15
		324,849 21
Deduct repayments:		
By O. E. Babcock	$3,078 82	
G. W. Coffin	767 74	
G. T. Davis	5,000 00	
G. W. Hayward	279 16	
F. Rogers	428 78	
C. W. Raymond	2,372 90	
W. S. Schley	3,315 83	
J. C. Watson	1,040 68	
J. K. Winn	139 24	
		16,423 15
		308,426 06
Repairs and preservation of public buildings, 1882:		
To J. H. Mersman		20
L. McKenzie		5 00
C. W. Meitkel		5 85
J. P. Whitmore		585 00
		596 05
Repairs and preservation of public buildings, 1884:		
To T. J. Hobbs		3,999 86
Repairs and preservation of public buildings, 1884:		
To Chicago, Milwaukee and Saint Paul R. R		66
T. J Hobbs		145,000 00
Pennsylvania Company		94
Treasury Department		82 34
		145,083 94
Deduct repayment:		
By Treasury Department		6 54
		145,077 40
Furniture and repairs of same for public buildings, 1882:		
To assignees of Tuttle & Schwing		3 50
T. Cordis		5 00
Demueler Bros		9 00
C. W. Meitkel		51 10
E. L. Spear & Co		2 60
C. J. White		33 40
		104 60
Furniture and repairs of same for public buildings, 1883:		
To T. J. Hobbs		18,000 00
W. H. Robertson		38 83
Treasury Department		493 04
R. M. Yale & Co		4 87
		18,536 74
Furniture and repairs of same for public buildings, 1884:		
To T. J. Hobbs		310,000 00
A. W. Hall		17 70
T. B. Johnson		7 71
Treasury Department		132 51
F. N. Wicker		4 00
		310,161 92
Deduct repayment:		
By Treasury Department		336 00
		309,825 92
Fuel, light, and water for public buildings, 1882:		
To J. A. Andrae		$1 50
Chicago Herald		88 40
Chicago Tribune Company		59 36
C. L. Cheney		6 00
Chicago Evening Journal		31 64
Chicago Morning News		45 64
M. J. Daly		5 28
T. J. Hobbs		213 88
Inter-Ocean Publishing Company		23 12
R. H. Kellogg		1 75
Klinck, Wickenberg & Co		5 80
D. Libby		30 00
C. W. Meitkel		3 40
Toney & Son		62 90
		578 67
Fuel, light, and water for public buildings, 1883:		
To city of Richmond, Va		200 41
City of Saint Louis, Mo		350 00
Chicago Herald		16 15
Chicago Evening Journal		15 38
City of Philadelphia, water department		280 50
Cooper & Conrad		25 00
T. J. Hobbs		20,600 00
Jersey City, N. J		9 91
Lord & Taylor		28 10
R. Pearmell		1 66
Treasury Department		2 49
Taney & Son		68 25
		21,597 85
Fuel, light, and water for public buildings, 1884:		
To city of Richmond, Va		2,514 04
City Water Works, Richmond, Va		138 75
City of Philadelphia, water department		280 50
City of Saint Louis, Mo		350 00
T. J. Hobbs		440,000 00
Jersey City, N. J		49 54
Richmond City Gas Works		191 40
Treasury Department		49 91
		443,574 14
Deduct repayments:		
By T. O. Hobbs	$2 00	
C. W. Watkins	47 59	
		49 59
		443,524 55
Heating apparatus for public buildings, 1882:		
To Bartlett, Hayward & Co		2,419 00
O'Neil & Co		326 77
		2,745 77
Heating apparatus for public buildings, 1883:		
To T. J. Hobbs		1,930 79
Treasury Department		172 13
		2,102 92
Deduct repayment:		
By T. J. Hobbs		172 13
		1,930 79
Heating apparatus for public buildings, 1883 and 1884:		
To T. J. Hobbs		15,000 00
Heating apparatus for public buildings, 1884:		
To T. J. Hobbs		90,000 00

1883–'84. CUSTOMS.

Pay of custodians and janitors, 1881 and prior years:		
By G. A. Bartlett	$843 52	
Pay of assistant custodians and janitors, 1884:		
To G. A. Bartlett		340,000 00
Marine Hospital Service:		
To Adams Express Company		168 45
A. W. Bush		3,100 00
G. A. Bartlett		455,000 00
Baltimore and Ohio Railroad		58 78
Chicago, Rock Island and Pacific Railroad		71 76
Central Pacific Railroad		177 11
Cincinnati ports, Big Sandy and Pomeroy Packet Co		51 00
F. Drowner		8 00
Empire Line		12 42
Erie and North Shore Dispatch		13 56
P. French		300 00
W. G. Morris		499 00
Mutual Gas Company, Detroit, Mich		232 50
C. McMillan		7 28
G. Meurer		36 80
Oregon Railway and Navigation Company		2 18
Pacific Coast Steamship Co		99 28
Pennsylvania Company		1 59
F. N. Shurtleff		1,965 20
E. L. Sullivan		9,350 00
W. H. Sears		1,600 00
Treasury Department		620 70
Union Pacific Railroad		305 08
F. N. Wicker		2,395 20
		476,075 89
Deduct repayments:		
By appropriation account	$1,206 85	
J. W. Burke	595 00	
A. W. Bash	144 00	
A. S. Badger	305 00	
A. J. Beers	236 00	
F. N. Dow	203 22	
C. S. English	58 78	
W. G. Henderson	48 31	
T. F. Johnson	51 00	
T. B. Johnston	9 75	
A. G. Malloy	591 35	
C. B. Marchant	178 00	
E. J. Pennypacker	395 14	
J. J. Piatt	39 30	
F. N. Shurtleff	22 63	
E. L. Sullivan	1,630 89	
H. W. Sawtelle	633 23	
Treasury Department	2,479 05	
J. M. Tarble	115 00	
J. A. Tibbits	1 45	
F. N. Wicker	466 87	
R. Worthington	1,094 50	
E. H. Webster	1 40	
H. A. Webster	181 72	
		10,688 44
		465,387 45
Life-Saving Service, 1882:		
To T. J. Blakeney		6 00
W. W. Burnes		20 65
W. P. Canaday		1 35
J. Etheridge		50 00
H. E. Huntting		85
Lanehart and Company		4,900 00
M. M. Midgett		161 12
J. D. Persons		20 75
Treasury Department		800 00
Carried forward		5,960 72

Life-Saving Service, 1882—Cont'd.		
Brought forward		$5,960 72
Deduct repayments:		
By J. W. Etheridge	$541 39	
N. Robbins	53	
		541 92
		5,418 80
Life-Saving Service, 1883:		
To A. Bolangs		1 36
G. A. Bartlett		1,500 00
J. Butcher		3,072 00
G. F. Babcock		32
R. A. Chessbrough		162 50
Chicago, Rock Island and Pacific R. R		3 21
Central Pacific R. R		8 57
W. Clark		3 25
L. M. Clunon		1 20
D. P. Dobbins		83 40
F. N. Dow		64 35
W. M. Devan		7 58
J. W. Etheridge		47 50
Jerome Etheridge		50 00
Higgins & Gifford		1,260 00
J. G. W. Havens		169 73
H. E. Huntting		30 05
J. G. Kiah		110 00
D. A. Lyle		18 00
C. S. Merriman		5,000 00
J. H. Miller		25 00
G. E. McConnell		13 23
V. R. Morgan		27 00
F. H. Newcomb		53 10
Northern Lake Ice Company, Louisville, Ky		75
S. A. O'Brien		25 00
Propeller St. Marie, Sault St. Marie, Mich		13 35
J. D. Persons		54 53
R. A. Robbins		3,370 49
N. Robbins		52 53
J. M. Richardson		4 06
B. S. Rich		6 75
B. C. Sparrow		25
Treasury Department		84 73
Union Pacific R. R		11 24
D. J. Whitney		8,095 59
T. Williams		4 97
		23,435 59
Deduct repayments:		
By T. J. Blakeney	$114 82	
D. P. Dobbins	1,984 03	
W. A. Hutchings	3 02	
J. G. W. Havens	01	
J. G. Kiah	314 16	
N. Robbins	73 59	
B. C. Sparrow	33 63	
		2,523 26
		20,912 33
Life-Saving Service, 1884:		
To G. A. Bartlett		33,000 00
T. J. Blakeney		15,156 46
G. F. Babcock		2 00
Baltimore and Ohio Express		1 25
R. A. Chessbrough		81 25
M. Clark		3 02
Central Pacific R. R		41 82
L. M. Clemons		1 95
D. P. Dobbins		39,156 00
W. M. Devan		35
J. W. Etheridge		94,505 35
C. E. Folger		175 00
W. H. Godrey		1,676 00
J. G. W. Havens		145,835 20
W. A. Hutchings		15,261 53
H. E. Huntting		126,827 04
H. M. Hopkins		156 67
Higgins & Gifford		210 00
Carried forward		472,090 89

Life-Saving Service, 1884—Cont'd.

Brought forward		$472,090 89
To I. Imhauser		800 00
C. F. Jordon		116 94
J. G. Kiah		44,765 30
G. W. Knox		6 32
D. A. Lyle		65 52
A. E. Lowell		1 31
G. E. McConnell		50
V. R. Morgan		175 67
J. H. Merryman		14 65
J. H. Miller		8 33
G. Markwick, deceased		225 81
Muskegon Novelty Iron Works		47 00
F. H. Newcomb		21 05
Navy Department		195 00
Northern Lake Ice Company, Louisville, Ky		8 85
Propeller St. Marie, steamship the Michigan		4 20
Pennsylvania Company		1 67
N. Robbins		61,257 38
J. M. Richardson		27,806 34
B. S. Rich		43,866 05
R. A. Robbins		7,905 16
B. C. Sparrow		62,212 91
C. H. Spencer		3,454 95
Sussfeld, Lorsch & Nordlinger		1,662 52
H. Steffens		2,775 00
W. G. Stevens		2 25
Sussfeld, Lorsch & Walker		4,836 42
J. B. Sutherland		450 00
Treasury Department		011 61
Tiffany & Co		509 00
Union Pacific Railroad		55 19
D. J. Whitney		44 73
W. D. Wyvill		2 50
Woodward & Lathrop		4 53
T. Williams		10 36
W. Walker		13 50
War Department		7,792 78
		743,822 19
Deduct repayments:		
By D. P. Dobbins	$410 04	
J. G. W. Havens	1,102 29	
H. E. Huntting	7 74	
J. G. Kiah	110 00	
J. M. Richardson	18	
Treasury Department	5 45	
		1,635 70
		742,186 49

Life-Saving Service, contingent expenses, 1881 and prior years:

By J. M. Richardson	$1 50	

Establishing life-saving stations (no limit):

To S. Ayers		1,255 00
A. F. Blossom		4,200 00
G. A. Bartlett		10,000 00
A. M. Cox		3,600 00
C. E. Folger		53 80
C. F. Jordan		8 06
J. G. Kiah		100 00
Jordan & Bond		4,665 00
H. Lape		14,546 13
J. H. Miller		216 67
V. R. Morgan		9 68
J. H. Merryman		8 10
J. B. Macy		54 84
B. S. Rich		25 60
R. A. Robbins		2,147 90
Ryan, Johnson & Co		40 00
Sussfeld, Lorsch & Nordlinger		266 50
C. H. Spencer		44 70
The Dyer heirs		200 00
War Department		3,562 56
Carried forward		45,004 54

Establishing life-saving stations (no limit)—Continued.

Brought forward		$45,004 54
Deduct repayment:		
By Treasury Department		800 00
		44,204 54

Rebuilding and improving life-saving stations:

By D. P. Dobbins	$80 21	
J. G. W. Havens	251 50	
H. E. Huntting	364 01	
N. Bobbins	56 75	
		752 47

Rebuilding revenue steamer William Pitt Fessenden:

To G. A. Bartlett		6,000 00
Union Dry Dock Company, Buffalo, N. Y		31,969 20
		37,969 20

Rebuilding revenue steamer Commodore Perry (no year):

To Union Dry Dock Company		44,527 11

Constructing two steam launches (no year):

To G. A. Bartlett		390 00
Union Dry Dock Company		7,238 61
		7,628 61

Building or purchase of such vessels as may be required for the revenue service:

To Com. Adv. Asso		6 40
Deduct from repayments:		
By J. W. Burke	$29 20	
F. N. Dow	436 76	
Downing & Lawrence	490 00	
A. W. Hall	75 55	
W. H. Robertson	903 50	
E. L. Sullivan	460 90	
Treasury, U. S.	7 50	
Union Dry Dock Company	8,000 00	
F. N. Wicker	6 80	
W. Wright	800 00	
R. Worthington	16 00	
		11,226 21
Excess of repayments		11,219 81

Compensation in lieu of moieties, 1883:

To W. H. Robertson		442 85
Deduct repayments:		
By S. Moffitt	$24 50	
A. Tibbetts	6 26	
		30 76
		412 09

Compensation in lieu of moieties, 1884:

To D. V. Bell		187 00
J. Bookwalter		2 83
A. A. Burleigh		150 00
A. W. Bash		348 74
W. H. Daniels		292 85
F. N. Dow		705 64
D. F. Davis		256 25
B. Flagler		144 97
J. F. Froideraux		1,152 66
H. P. Farrow		24 75
W. M. Haycock		81 06
W. Hartsuff		25 90
J. L. Haynes		144 26
Carried forward		3,516 01

1883–'84. CUSTOMS.

Compensation in lieu of moieties, 1884—Continued.		
Brought forward		$3,516 01
To A. F. Howard		67 32
J. F. Hartranft		90 42
W. H. Hunt, jr		79 77
G. W. Howe		287 50
J. D. Hopkins		65 46
J. S. Hanover		80 00
A. H. Jones		131 10
W. Livingstone, jr		6 24
S. Moffitt		717 78
J. O. Lubey		39 79
D. McLaughlin		494 95
D. W. McClung		1,337 50
T. J. Nutter		53 25
N. Plato		30 24
W. H. Robertson		5,373 44
J. H. Riley		850 47
J. Spaulding		557 25
W. F. Simpson		28 75
E. L. Sullivan		6,858 51
W. H. Sears		917 38
A. Tibbetts		5,929 02
F. A. Vaughan		17 27
F. N. Wicker		181 60
W. Wells		546 73
R. Worthington		462 41
J. W. Wakefield		142 12
C. M. Whitney		873 67
G. W. Warren		62 50
	29,798 45	
Deduct repayment:		
By E. L. Sullivan	1 00	
	29,797 45	
Salaries and traveling expenses of agents at seal fisheries in Alaska, 1882:		
By H. A. Glidden	$176 55	
L. Kimmel	184 50	
	361 05	
Salaries and traveling expenses of agents at seal fisheries in Alaska, 1883:		
To H. A. Glidden		3,451 63
L. Kimmel, assistant agent		1,642 50
J. H. Moulton, assistant agent		489 35
Treasury Department		728 00
G. Wardman		483 00
		6,794 48
Salaries and traveling expenses of agents at seal fisheries in Alaska, 1884:		
To Central Pacific Railroad		82 45
H. A. Glidden		3,302 88
L. Kimmel		1,995 70
J. H. Moulton		730 00
E. L. Sullivan		611 68
Union Pacific Railroad		108 00
G. Wardman		547 50
		7,378 21
Protection of sea-otter hunting grounds and seal fisheries in Alaska, 1882:		
To Treasury Department		25,000 00
Distribution of standard weights and measures for use of colleges (no year):		
By W. B. Morgan	$0 65	
Custom-house and post-office, Fall River, Mass.:		
To J. Brady, jr.		$2,500 00
J. M. Morton		770 75
Pocusset Manufacturing Company		26,634 31
G. P. Sanger		1,000 00
		30,905 06
Custom-house, Hartford, Conn.:		
To G. A. Bartlett		17 55
H. C. Robinson		9,000 00
		9,017 55
Deduct repayment:		
By H. C. Robinson		55 02
		8,962 53
Custom-house and post-office, Albany, N. Y.:		
To G. A. Bartlett		24 26
W. H. Craig		49,697 37
Treasury Department		18 08
		49,739 71
Barge-office building, New York:		
To G. A. Bartlett		4 75
Deduct from repayment:		
By W. H. Robertson		377 82
Excess of repayment		373 07
Custom-house and post-office, Buffalo, N. Y.:		
To G. A. Bartlett		3,473 29
C. A. Gould		32,000 00
Treasury Department		20 92
		35,494 21
Custom-house, New Orleans, La.:		
To G. A. Bartlett		342 62
A. S. Badger		23,000 00
Treasury Department		118 37
		23,460 99
Marine Hospital, New Orleans, La.:		
To A. S. Badger		57,000 00
G. A. Bartlett		282 31
		57,282 31
Custom-house, &c., Galveston, Tex.:		
To G. A. Bartlett		620 60
A. P. Lufkin		20,000 00
		20,620 60
Custom-house and post-office, Cincinnati, Ohio:		
To G. A. Bartlett		10,650 53
D. W. McClung		360,000 00
Treasury Department		24 47
		370,675 00
Custom-house and post-office, Cleveland, Ohio:		
To G. A. Bartlett		2,718 55
G. W. Howe		54,000 00
Treasury Department		9 79
		56,728 34
Custom-house, &c., Toledo, Ohio:		
To J. B. Battelle		61,000 00
G. A. Bartlett		6,528 72
Treasury Department		18 22
		67,546 94

Marine Hospital, Cincinnati, Ohio:
To G. A. Bartlett $837 65
D. W. McClung 20,000 00
C. Richards 500 00
21,337 65

Custom-house, court-house, and post-office, Evansville, Ind.:
To G. A. Bartlett 92 60

Custom-house, sub-Treasury, &c., Chicago, Ill.:
To G. A. Bartlett 168 03
Deduct repayment:
By J. Spalding 117 41
50 62

Bridewell dock property, Chicago, Ill:
To G. A. Bartlett 825 29

Marine Hospital, Memphis, Tenn.:
To G. A. Bartlett 79 64
T. F. Cassels 32,000 00
32,079 64
Deduct repayment:
By W. J. Smith 26 00
32,053 64

Marine hospital, Cairo, Ill.:
To G. A. Bartlett 882 35
J. A. Connolly 300 00
G. Fisher 5,000 00
Estate, E. Townsend, deceased 4,350 00
Unknown owners and parties interested in said premises jointly 01
Costs in said suit 85 55
W. R. Holbrook 9,666 66
S. Staats, Taylor and E. Parsons 483 33
20,767 90

Custom-house and post-office, Memphis, Tenn.:
To G. A. Bartlett 5,069 29
T. F. Cassels 55,000 00
Treasury Department 16 63
60,085 92

Custom-house, court-house, and post-office, Nashville, Tenn.:
To G. A. Bartlett 300 00
Deduct repayment:
By A. Wolf 112 29
187 71

Custom-house, Saint Louis, Mo.:
To G. A. Bartlett 1,938 11
Treasury Department 5 68
C. M. Whitney 70,000 00
71,943 79

Custom-house, Kansas City, Mo.:
To G. A. Bartlett 1,912 55
P. Doppler 82,000 00
Treasury Department 5 15
83,917 70

Appraiser's stores, San Francisco, Cal.:
To G. A. Bartlett 341 67
E. L. Sullivan 14 50
356 17

Ram Island light-station, Maine:
To C. W. Raymond $5,000 00
Deduct repayment:
By C. W. Raymond 3,219 47
1,780 53

Danskammer Point fog-bell, New York:
To J. C. Duane 5,000 00

Hell Gate electric lights, New York:
To J. C. Duane 10,000 00

Staten Island depot, New York:
By J. C. Duane $4 43

Barnegat light-station, New Jersey:
By W. F. Raynolds $103 09

Absecom light-station, New Jersey:
By W. F. Raynolds $1,728 55

Horseshoe Shoals range-lights, New Jersey:
By W. F. Raynolds $77 63

Cohansey light-station, New Jersey:
By W. F. Raynolds $363 79

Fourteen-Foot Bank light-station, Delaware Bay:
To D. P. Heap 500 00
W. H. Heuer 51,000 00
W. F. Raynolds 1,000 00
52,500 00
Deduct repayments:
By D. P. Heap $251 31
W. F. Raynolds 817 36
1,068 67
51,431 33

Lazaretto depot, Maryland:
To O. E. Babcock 3,000 00
Deduct repayment:
By O. E. Babcock 557 26
2,442 74

Great Shoals light-station, Maryland:
To O. E. Babcock 10,000 00
J. A. Smith 5,000 00
15,000 00
Deduct repayment:
By O. E. Babcock 4,517 72
10,482 28

Sandy Point Shoal light-station, Maryland:
To O. E. Babcock 15,000 00
Deduct repayment:
By O. E. Babcock 190 60
14,809 40

Kent Point light-station, Maryland:
By O. E. Babcock $42 22

Patuxent River range lights, Maryland;
To O. E. Babcock 10,000 00
Deduct repayment:
By O. E. Babcock 355 28
9,644 72

Portsmouth depot, Virginia:
By O. E. Babcock $1,000 00

1883–'84. CUSTOMS.

Bell's Rock light-station, Virginia:
By O. E. Babcock..... $5 35

Hilton Head and Bay Point light-station, South Carolina:
To O. E. Babcock..... $45 60

Paris Island light-station, South Carolina:
By W. A. Jones..... $118 34

Lights on the Savannah River, Georgia:
To O. E. Babcock..... 16,838 00
J. A. Smith..... 5,000 00
21,838 00
Deduct repayment:
By O. E. Babcock..... 7,886 54
13,951 46

Repairs of iron light-houses, Florida:
By W. H. Heuer..... $398 04

Florida Reef beacons, Florida:
By W. H. Heuer..... $239 42

Sanibel Island light-station, Florida:
To W. H. Heuer..... 15,000 00
T. Turtle..... 29,000 00
44,000 00
Deduct repayment:
By W. H. Heuer..... 9,062 28
34,937 72

Mosquito Inlet light-station, Florida:
To O. E. Babcock..... 25,000 00
J. A. Smith..... 5,000 00
30,000 00
Deduct repayment:
By O. E. Babcock..... 4,369 53
25,630 47

Cape San Blas light-station, Florida:
To W. H. Heuer..... 15,000 00
T. Turtle..... 20,000 00
35,000 00
Deduct repayment:
By W. H. Heuer..... 10,010 12
24,989 88

Dog River Bar and Chocktaw Pass Channel, Alabama:
To T. Turtle..... 500 00

Maumee range beacons, Ohio:
To C. E. L. B. Davis..... 19,000 00

Sandusky Bay light-station, Ohio:
To E. H. Pardue..... 12 15

Waugoshance light-station, Michigan:
To C. E. L. B. Davis..... 25,000 00

Little Traverse light-station, Michigan:
To C. E. L. B. Davis..... 10,000 00

Portage River light-station, Michigan:
To C. E. L. B. Davis..... 1,000 00

Pier-head beacon lights on the Lakes, Michigan:
To C. E. L. B. Davis..... $1,444 74

Stannard's Rock light-station, Michigan:
To C. E. L. B. Davis..... 13,000 00

Detroit River light-station, Michigan:
To C. E. L. B. Davis..... 20,000 00

Point Robinson fog-signal, Washington Terrltory:
To C. F. Powell..... 6,500 00

Lights, beacons, and buoy's, Willamette and Columbia Rivers, Oregon:
To G. T. Davis..... 500 00
Deduct repayment:
By G. T. Davis..... 500 00

Lime Point fog-signal, California:
To A. H. Payson..... 10,000 00
Deduct repayment:
By A. H. Payson..... 19
9,999 81

Northwest Seal Rock light-station, California:
To A. H. Payson..... 70,000 00

Steam tender for the Atlantic coast:
To New York Herald..... 20 80
Deduct repayment:
By G. Brown..... 13 30
7 50

Survey of light-house sites:
By J. C. Duane..... $248 47

Survey of light-house sites, 1884:
To O. E. Babcock..... 1,000 00
J. C. Duane..... 1,300 00
J. A. Smith..... 986 25
3,286 25
Deduct repayment:
By O. E. Babcock..... 986 25
2,300 00

Establishment and maintenance of lighted buoys:
To G. Brown..... 8,500 00

Lighting and buoyage of the Mississippi, Missouri, and Ohio Rivers, 1882:
To J. O'Kane..... 40 77

Lighting and buoyage of the Mississippi, Missouri, and Ohio Rivers, 1883:
To A. G. Kellogg..... 11,840 60
J. O'Kane..... 15,000 00
Treasury Department..... 2 25
Webster & Neely..... 20 00
26,862 85
Deduct repayments:
By A. G. Kellogg..... $0 23
R. S. McCook..... 4,968 14
J. J. Read..... 21,172 76
26,141 13
721 72

1883–'84. CUSTOMS.

Lighting and buoyage of the Mississippi, Missouri, and Ohio Rivers, 1884:		
To B. F. Day	$500 00	
A. G. Kellogg	63,500 00	
W. E. Merrill	500 00	
J. O'Kane	97,000 00	
	161,500 00	
Deduct repayment:		
By Treasury Department, Light-House Board	243 60	
	161,256 40	
Completing the lighting and buoyage of Ohio River:		
By R. S. McCook	$3,194 07	
Repayments to importers, excess of deposits, act August 5, 1882:		
To Dudenfreres	11,630 31	
J. M. Strong	277 12	
	11,907 43	
Repayments to importers, excess of deposits, charges and commission cases:		
To W. H. Robertson (charges):		
Due W. S. Wilson and F. Brown	38 80	
W. H. Robertson	138 90	
	177 70	
Repayment to importers, excess of deposits, act March 3, 1881:		
By W. H. Robertson	$4,783 26	
Repayment to importers, excess of deposits (no limit):		
To Arnold Constable & Co	555 51	
W. F. Andrews	20 00	
F. Avena	76 40	
L. W. and P. Armstrong	10 00	
J. Abbott & Co	1,067 11	
American Screw Company	1,339 05	
T. T. Ainsworth	48 60	
L. Asch	18 00	
J. H. Allen	477 45	
J. T. Alburger & Co	112 75	
G. A. Angell	2 10	
American Export and Warehouse Company	627 00	
American Sugar Refinery	2,857 35	
L. Armstead & Co	1,242 15	
Avendano Bros	41 70	
Allen & Ginter	29 70	
Brigg, Entz & Co	4,536 80	
A. S. Badger	45,000 00	
D. V. Bell	1,400 00	
Bradlee & Co	636 92	
J. B. Battelle	100 00	
E. H. Bailey & Co	15 30	
J. W. Burke	1,000 00	
C. Bauer	53 85	
G. Borgfelder & Co	2 70	
Boston Cordage Company	246 69	
J. M. Brunswick & Balke Company	39 88	
J. Black	54 20	
W. H. Brown	44 00	
J. Bookwalter	46 90	
H. Bernheimer, Son & Co	47 08	
P. E. Brulatour & Co	27 00	
F. De Bary & Co	10 50	
Belloni & Co	269 40	
E. B. Bruce & Co	13 40	
G. E. Bowden	400 00	
Bremer & Co	32 50	
H. B. Bailey & Co	39 60	
Block & Davidson	26 75	
J. Baird & Sons	714 80	
Carried forward	63,283 14	

Repayment to importers, excess of deposits (no limit)—Continued.		
Brought forward		$63,283 14
To Burke, Walker & Co		115 27
M. S. Barrett		24 90
J. Brand		132 80
Wm. Barr Dry Goods Company, Saint Louis		31 60
A. C. Babson		581 35
J. Bolgiano & Son		202 60
Blake, Dowell & Helm		14 20
J. M. Brown & Co		431 40
Bateman Manufacturing Company, Philadelphia, Pa		35 20
C. W. Bertaux		1,557 00
Balfour, Guthrie & Co		343 34
A. J. Beers		1,000 00
Bates, Reed & Cooley		153 35
F. Blumenthal & Co		51 30
F. Butterfield & Co		236 71
J. Berry		7 20
J. Boeck & Son		123 80
A. S. Blumenthal		157 50
Benziger Bros		2 50
F. C. Butman		13 99
Bailey, Banks & Biddle		118 50
Baldwin Bros. & Co		10 00
M. Bing		7 40
G. L. Brown		3 80
Benham & Boyeson		269 40
G. Bridge, deceased		8 15
Boston Sugar Refining Company		97 06
G. & J. Ballin		230 02
G. Barrie		115 80
W. Crabbe		129 75
B. C. Cook		902 50
H. B. Claflin & Co		37 57
W. Cochrane		26 10
E. Christenson		390 50
H. E. Clark		20 00
W. T. Coleman & Co		131 20
Chicago Music Company		7 00
R. C. Crowell		200 00
H. de B. Clay		100 00
A. A. Cobb & Co		412 70
W. Clark		137 60
Corbitt & Macleay		431 59
Carson, Pirie, Scott & Co		311 45
Calhoun, Robbins & Co		6 10
Canadian Exchange Company		12 20
City Butter Works, New York		35 10
C. Cavaroe & Son		89 49
W. B. Chapman		18 80
California Sugar Refinery		602 40
H. Cold & Co		31 05
A. Cusimano & Co		480 60
A. B. Cleveland		3,310 89
H. T. Chase		52 00
C. Cooper & Co		117 90
Chung Yune		158 40
Comstock, Ferre & Co		200 80
California Southern Railroad		16 53
Collender, McAusland & Troop		21 00
China and Japan Trading Company		4,228 40
J. Campbell		58 00
Lizzie Chisholm		28 00
W. H. Daniels		402 39
J. T. Donnell & Co		2,449 45
Dreyfus, Heaht & Co		24 50
Dreyfus, Kohn & Co		126 40
F. N. Dow		1,660 40
S. Dodge		18 67
Davis, Atkinson & Co		1,545 47
J. F. Dravo		1,000 00
Dunham, Buckley & Co		36 35
Dickerson, Van Duses & Co		210 94
Dieckerhoff, Raffloer & Co		260 30
S. C. Davis & Co		38 40
Elise Dallemond		75 00
Downing, Sheldon & Co		1,544 68
Carried forward		91,457 85

1883–'84. CUSTOMS.

Repayment to importers, excess of deposits (no limit)—Continued.		
Brought forward	$91,457	85
To L. B. Dowd & Co	278	00
A. C. Davis	466	92
T. C. Dempsey	145	60
De Wolf & Hammond	208	80
Dick & Mayer	185	38
L. B. Demass	226	93
P. Donald & Co	689	78
J. Elliott & Co	673	85
Eisner & Mendelson	64	00
M. A. Edgar	380	16
Erie Forge Company, Erie, Pa	172	12
Emerson, Rhodes & Co	31	51
Emerson & Fisher Company	59	90
Elgin National Watch Co	787	80
Edson, Keith & Co	3	15
Eureka Iron Company	4,200	93
B. Flagler	200	00
Frieberg & Workum	2	25
H. L. Fearing & Co	4,259	14
J. K. Faulkner	200	00
F. L. Felton	20	45
Forstall, Clayton & Co	652	50
S. V. Formans & Co	251	20
Funch, Edye & Co	430	50
Fuller & Fuller	124	85
J. V. Farwell & Co	208	55
S. Fallina	88	40
L. S. Friedberger & Co	88	75
D. M. Ferry & Co	665	80
J. Freund & Co	441	66
J. H. Foote	5	20
T. & G. Forwood	141	60
Fleischmann & Co	70	35
J. P. Farrell	86	50
D. F. Ferry & Co	2,054	20
Fowler Bros	3,625	12
A. Ferrier	3	08
P. Farrelly	66	60
Florence Manufacturing Co	8,152	31
A. Fries & Bros	46	75
J. Freedman	424	93
Gomez & Pearsall	429	00
H. Griffin & Sons	37	65
G. C. Gicken & B. Greening	25	00
Goldenberg Bros. & Co	356	90
C. A. Gould	1,000	00
J. W. Grace & Co	81	90
F. Granger	16	13
J. W. Goewtz & Co	4	50
W. R. Grace & Co	619	80
W. Griffin	20	00
J. Gibson	26	50
C. Gossage & Co	148	40
I. L. Gould & Co	11	85
S. Godwin's Son	106	75
Gabain & Co	29	10
Grunwald & Smith	22	50
F. Granger	4	90
C. Gantschi & Co	7	80
T. A. Henry	18	07
J. F. Hartranft	405,215	90
A. W. Hall	900	00
G. W. Howe	1,500	00
J. B. Hand, jr., & Co	2	33
W. Hame	8	95
P. Hayden	8	85
W. H. Huse	33	10
C. Harris	2,464	71
T. B. Harris	23	40
Haas Bros	335	40
Hellmann, Hass & Co	54	60
Hinckley Bros. & Co	34	95
Haas & Bleichroder	239	13
Hartman, Laist & Co	20	84
S. L. Haight	16	40
H. Herman, Sternbach & Co	39,025	84
Hennegan, Bates & Co	5	90
Halsted, Harris & Co	303	38
G. Hormung	10	00
Carried forward	575,513	80

Repayment to importers, excess of deposits (no limit)—Continued.		
Brought forward	$575,513	80
To E. N. Hurlbut	39	00
Hume Bros. & Co	66	33
M. Hansen	227	89
A. Hunter	1	80
Hall & Vaughan	262	50
Heffrom & Corcoran	74	50
G. Henstorff	5	25
W. H. Horstmann & Sons	155	04
Horstmann, Van Hein & Co	34	20
W. Heise	7	53
J. Harmonicaux	247	50
Hathaway, Cooper & Co	156	00
Hatch Bros	619	72
G. F. Holms	85	50
M. Henderson	20	00
Hawkins & Gazarya	80	40
Hop Chong	191	50
E. Heinemann & Co	81	80
Hately Bros	1,964	29
T. O. Hagne	2,818	40
Howard & Co	1,096	55
F. T. Haskell	1	75
J. Hahn		60
H. Hein	2	60
C. Hunt & Co	85	20
Higgin, Lloyd & Co	3	15
F. H. Hardy & Co	49	35
Heyer Bros	2	40
F. B. Hanck & Co	24	70
Iselin, Neeser & Co	149	40
W. B. Isbell & Co	108	00
J. Joseph & Bros	772	61
T. F. Johnson	511	10
E. S. Jaffray & Co	181	92
O. Jaffe & Pinkus	7,652	48
T. B. Johnston	500	00
R. C. Janion & Son	46	44
W. S. Jones	682	45
F. Junker	2	50
Johnson, Robbins & Co	38	80
Jordan, Marsh & Co	45	40
Kwong Lee Kee & Co	2	60
J. N. Knowles	30	90
C. H. Kathun	2	50
W. King	25	00
Kwong Chong Wa	21	38
Kwong Loon Ke	119	70
O. Korvemann	37	50
A. King & Co	50	00
J. H. Knight	20	00
Klein Bros. & Hyman	4	00
T. Kearney	55	00
Koch Sons & Co	45	45
J. King	5	60
Kingan & Co	2,839	45
King & Co	498	66
D. A. Lindsay	141	80
C. Libert and F. V. Specht	80	16
J. Lord	2,637	60
W. Lattimer & Co	40	56
E. Ludwig	29	60
Lesher, Whitman & Co	162	37
J. Lee, Smith & Co	52	75
Lyon & Healey	3	80
Linn & Evans	828	40
J. R. Leonard	500	00
Lindauer Bros. & Co	21	25
Langfeld & Heidelberger	35	20
Letson & Hashagen	74	77
W. Livingstone, jr	1,000	00
Lewander & Co	8	50
A. Lorsch	8	50
G. W. Lasher & Son	178	08
R. Lorange	129	00
J. R. Leeson & Co	205	35
R. & D. Lant	124	96
J. J. Lamoree	400	00
E. Losee	119	70
P. H. Leonard	225	60
J. F. Leng	12,859	72
Carried forward	618,235	76

Repayment to importers, excess of deposits (no limit)—Continued.	
Brought forward	$618,235 76
To Marshall, Field & Co	415 03
D. W. McClung	5,000 00
A. G. Malloy	2,900 00
S. M. Moffitt	700 00
Montfort & Co	4 20
A. K. Miller & Co	490 50
H. D. May & Co	135 90
W. D. Marvell	100 40
C. McInnes	2,127 50
Mills & Gibb	132 98
C. E. Morris	10,000 00
C. P. Mebane	136 50
L. P. Moore & Co	334 75
F. McGuire	94 70
A. J. McBriers	29 80
Miller, Castor & Co	14 40
J. Moller & Co	161 10
J. C. Montgomery	500 00
R. J. McKeon	503 78
Man Tuk	36 83
L. E. Moore & Co	892 80
J. W. Mason & Co	2,882 86
J. Meyer & Co	56 00
Meyer & Dickinson	12,624 30
Meyers, Wilson & Co	518 97
C. M. Maseman & Bro	22 00
R. H. Machim	60 00
C. C. Morton	555 80
G. W. Merritt	62 80
L. R. Marsh	2 50
Moran & Healy	343 19
Morgan, Root & Co	18 90
J. J. McComb	1,228 50
L. Manasse	54 10
A. McLachlan	63 50
T. S. Miller	26 25
Matthew & Son	136 50
M. J. Mikkelson	352 50
E. D. Morgan & Co	473 46
Merchants' Dispatch Transportation Company	16 80
New Bedford Cordage Company	842 72
H. Newman	65 44
A. D. Napier & Co	457 50
Nicol, Cowlishaw & Co	15 70
J. Nickerson & Co	1,799 81
C. H. Odell	50 00
J. L. Olsen	192 60
T. O'Connell	4 40
Oatman Bros. & Co	45 50
Obertueffer, Abegg & Co	38 50
O'Neal, Chaffin & Co	143 10
F. A. Osgood	40 00
New York, Texas and Mexican Railroad	11,019 98
J. W. Parker & Co	277 80
G. Potter & Co	177 00
M. J. Pailland & Co	88 20
W. Pickhardt & Kutorff	3,722 40
Pope & Talbot	147 90
Pictorial Printing Company	29 40
Phelps & Bryan	1 94
E. J. Pennypacker	925 97
Page, Newell & Co	7,004 87
Page, Fairchild & Co	201 80
A. Pullman	8 60
C. W. & E. Pardridge & Co	17 20
W. F. Poole	1 25
P. Phillips	40 50
J. A. Perkins	10 50
J. M. Pease	369 00
D. Putney	3,226 07
S. L. Prager	95 50
Pohe & Bro	144 80
W. H. Robertson	3,962,593 90
J. Reeve	124 91
J. de Rivera & Co	290 50
Rothschild & Schroder	114 80
Carried forward	4,656,775 32

Repayment to importers, excess of deposits (no limit)—Continued.	
Brought forward	$4,656,775 32
To Robbins, Appleton & Co	526 20
J. G. Ross	95 93
Richardson & Co	29 00
Rice & Stiefel	83 60
W. Ropes & Co	34 69
Rice Bros	8 77
H. S. Remington & Co	45 20
A. L. Rodgers & Bros	87 62
C. E. Riley & Co	267 45
J. L. & D. S. Ricker	268 80
R. N. Reynolds	89 50
Rogers, Meyer & Co	126 53
A. Rolker & Sons	9 00
Rhae & Bro	248 28
Rothfield, Stern & Co	810 51
Ryan & Kelsey	168 30
E. L. Sullivan	109,291 20
F. N. Shurtleff	5,000 00
J. Spalding	24,978 37
W. Stevens	7 13
O. Sieloff	3 00
F. W. Stephenson	195 00
C. Staple, jr	4 50
Scheetz & Ruckgaber	747 48
J. Saenger	27 80
G. W. Sheldon & Co	1,635 21
G. Schmidt	21 45
Sprague, Warren & Co	54 59
Saint Louis Stamping Company	541 40
F. H. Shallas	70
H. H. Sternbach & Co	1,766 30
A. D. Strauss & Co	143 82
A. T. Stewart & Co	3,836 02
C. Straehle	91 20
J. Secombe	58 69
D. Samuels	45 10
J. Shillito Company	278 60
Syberg, Peterson & Co	1 20
Spelmann & Co	26 40
Sherman, Cecel & Co	4 35
Smith, Churchill & Scribner	333 16
L. Strauss & Sons	23 40
A. Scribner	441 90
A. C. Smith	83 10
O. Strasburger & Co	2 40
W. H. Schieffelin & Co	147 25
E. H. Sprague	97 46
Sewall & Day Cordage Company	156 53
Scott & Co	742 12
H. Schubart & Co	82 40
Schener Brothers	166 60
Stern Brothers	40 00
J. Sinclair & Co	1,253 78
M. L. Steiglitz & Son	432 00
S. Swan & Son	189 22
Sandheim, Alsberg & Co	26 10
W. H. Sears	21,700 00
Snow & Burgess	17 10
Schering & Glatz	35 80
G. Simpson	58 00
L. E. Scrofford	747 72
J. M. Tarbell	400 00
M. Taylor & Co	208 81
L. Thompson & Co	23 66
T. Thomason	168 00
L. G. Tillotson & Co	2 40
Tong Duck Chang	59 03
S. W. Thompson, jr	470 40
Tice & Lynch	58 50
M. Taylor	680 40
J. Thompson	223 45
Tolwell Brothers & Co	92 40
Taylor, Kilpatrick & Co	101 50
T. C. Thompson	87 60
Thebaud Brothers	54 61
M. Thompson	20 00
H. Tilge & Co	1,890 30
N. Ubelhoer	133 70
Carried forward	4,839,885 01

Repayment to importers, excess of deposits (no limit)—Continued.		
Brought forward		$4,839,885 01
To Union Dry-Dock Company, Grand Haven, Mich	2 80	
Verghs, Ruhling & Co	24 10	
F. Vogeler & Co	2 40	
Vite Brothers	281 40	
R. Worthington	425,703 00	
C. M. Whitney	4,000 00	
Warumbo Manufacturing Company	3,086 73	
W. Wells	1,700 00	
Wilson & Co	53 34	
E. H. Webster	28,000 00	
S. F. W. Welsh	5,989 75	
A. & E. Wallach	34 50	
Wilmerding, Beddle & Bisset	145 50	
Willett, Hamlen & Co	5,389 88	
D. L. White & Co	327 67	
M. F. Whiton & Co	129 34	
P. Wright & Son	7 00	
J. H. Wilson	400 00	
E. Whitkrosy	43 00	
Welton & Allison	200 00	
G. W. Wilson & Co	300 38	
Wo Chong	18 63	
Woodward, Wright & Co	219 90	
Wilson, Stearly & Co	86 10	
Wilson Brothers	50 30	
Windnelfer & Roelker	537 75	
F. Wagner	11 70	
W. A. Wilkes	31 00	
A. H. Warthman & Co	117 39	
Warren & Healy	115 72	
W. W. Walmsley	18 75	
A. Weatscher	16 18	
Williams, Dimond & Co	8 40	
R. D. Wardner	5,289 00	
R. H. Wolff & Co	17 48	
R. Wurlitzer & Bros	24 68	
A. & E. Wallach	43 50	
A. K. Wilder & Co	37 52	
W. Young	19 20	
Yuen Wa	20 38	
Ye Ark & Co	29 78	
S. Zickel	9 25	
		5,322,428 41
Deduct repayments:		
By J. B. Battelle	$64 60	
J. W. Burke	212 51	
G. E. Bornden	111 70	
D. V. Bell	72 36	
H. de B. Clay	51 17	
W. H. Daniels	55 85	
B. Flagler	46 83	
G. W. Howe	54 43	
J. F. Hartranft	1,668 57	
A. H. Hall	196 92	
T. F. Johnson	162 15	
A. G. Malloy	392 22	
S. Moffitt	81 86	
C. E. Morris	42 17	
C. H. Odell	22 43	
W. H. Robertson	262,004 25	
F. N. Shurtleff	3 56	
W. T. Simpson	30 18	
E. L. Sullivan	780 61	
J. M. Tanbell	39 71	
W. Wells	187 03	
		266,281 11
		5,056,147 30
Debentures, drawbacks, bounties, or allowances (no limit):		
To J. A. P. Allen, New Bedford, Mass		11,724 14
A. S. Badger, New Orleans, La		16,719 32
A. J. Beers, New Haven, Conn		30,570 94
Carried forward		59,014 40

Debentures, drawbacks, bounties, or allowances (no limit)—Continued.		
Brought forward		$59,014 40
To Baring Brothers		61,780 62
A. W. Bash, Puget Sound, Wash		200 00
H. de B. Clay, Yorktown, Va		605 93
D. F. Davis, Bangor, Me		100 80
S. H. Dotan, Plymouth, Mass		311 74
W. H. Daniels, Oswegatchie, N. Y		5,259 77
J. F. Dravo, Pittsburgh, Pa		5,327 65
F. N. Dow, Portland, Me		16,500 00
B. Flagler, Niagara, N. Y		16 10
J. F. Hartranft, Philadelphia, Pa		260,000 00
A. W. Hall, Milwaukee, Wis		500 00
W. Hartsuff, Huron, Mich		281 82
T. F. Johnson, Savannah, Ga		9,000 00
T. B. Johnston, Charleston, S. C		5,128 38
J. D. Merryman, Oregon, Oreg		29,575 00
S. Moffitt, Champlain, N. Y		165 99
McCullough & Tait		424 29
A. G. Malloy, Galveston, Tex		7,500 00
N. B. Nutt, Passamaquoddy, Me		158 79
C. H. Odell, Salem, Mass		25 00
E. J. Pennypacker, Wilmington, N. C		1,202 75
W. H. Robertson, New York, N. Y		2,850,000 00
E. L. Sullivan, San Francisco, Cal		126,309 70
J. Spalding, Chicago, Ill		10,000 00
V. Smith, Duluth, Minn		470 45
F. N. Shurtleff, Willamette, Oreg		6,600 00
W. H. Sears, San Francisco, Cal		24,100 00
J. M. Tarble, Pensacola, Fla		200 00
W. Wells, Vermont, Vt		8,800 00
R. Worthington, Boston, Mass		350,000 00
E. H. Webster, Baltimore, Md		17,000 00
		3,856,559 18
Deduct repayments:		
By A. W. Bash	$113 62	
H. de B. Clay	190 32	
J. F. Hartranft	1,205 62	
A. W. Hall	308 37	
W. H. Robertson	198,596 10	
E. L. Sullivan	3,313 46	
W. Wells	1,872 20	
		205,599 69
		3,650,959 49
Debentures and other charges:		
To A. A. Burleigh		32 00
W. P. Canaday		1 00
J. R. Leonard		1 25
G. W. Warren		20 00
		54 25
Detection and prevention of frauds upon the customs revenue, 1883:		
To E. Biondo		724 00
G. A. Bartlett		874 57
R. J. Hinton		290 97
Union Pacific Railroad		109 00
Central Pacific Railroad		92 00
		2,090 54
Deduct repayments:		
By D. V. Bell	$641 50	
F. H. Mason	800 00	
		1,441 50
		649 04

1883-'84. CUSTOMS—INTERIOR CIVIL.

Detection and prevention of frauds upon the customs revenue, 1884:		
To G. A. Bartlett		$65,586 67
S. H. M. Byers		154 00
Central Pacific Railroad		38 94
Union Pacific Railroad		54 00
		65,833 61
Expenses of regulating immigration:		
To R. T. Allison		27 20
Commissioner of immigration, State of New York		207,475 13
Commissioner of immigration, Portland, Me		273 50
W. A. Lowe, commissioner of immigration, Key West		603 65
Pennsylvania board of public charities		5,125 96
E. Root		1,022 00
State board of immigration of Maryland		5,163 05
State board of immigration, Maryland		808 98
State board of health, lunacy, and charity, Boston, Mass		10,661 39
C. C. Sweeney and Andrew		177 00
C. C. Sweeney and A. Munn		95 00
A. Sterling, jr		500 00
A. W. Tenney		3,500 00
J. E. Ward & Co		6 00
P. Wright & Sons		5 00
		235,443 86
Inspection of neat cattle shipped to foreign ports, 1883:		
To A. M. Farrington		117 13
J. Law		618 10
A. J. Murray		28 75
A. H. Rose		148 33
		912 31
Inspection of neat cattle shipped to foreign ports (no year):		
To H. Ascherbach		29 00
A. Bergmann		95 00
M. Bunker		30 00
F. N. Dow		800 00
Carried forward		954 00

Inspection of neat cattle shipped to foreign ports (no year)—Cont'd.		
Brought forward		$954 00
To A. M. Farrington		138 77
W. Hudson		45 00
C. W. Knowles		2 10
J. Law, chairman, treasurer cattle commission, Cornell University, Ithaca, N. Y		906 63
J. W. Lynch		45 00
New York Belting and Packing Company		26 25
Patterson Brothers		24 47
A. H. Rose		126 40
W. H. Robertson		19,000 00
J. H. & E. Remig		17 01
J. H. Sanders		1,809 20
E. F. Thayer, member, treasurer, cattle commissioner, West Newton, Mass		1,476 13
E. F. Thayer		1,821 84
C. S. Terhune		12 45
R. Worthington		18,582 70
O. H. Wilson		24 50
E. H. Webster		10,000 00
		55,012 45
Deduct repayments:		
By G. A. Bartlett	$4,372 95	
W. H. Robertson	3,977 11	
		8,350 06
		46,662 39
Unclaimed merchandise:		
To F. Arena		38 35
A. S. & J. Brown & Co		163 59
T. Ollesheimer		83 28
Patterson & Neilson		9 70
F. S. Robinson & Co		14 62
Elizabeth Weightman		10 35
		319 89
Refunding moneys erroneously received and covered into the Treasury:		
To J. D. Bridge & Co		2 20
A. C. Lombard's Sons		13 51
J. L. Rapier		6 60
S. P. Wedford		15 00
		37 31

INTERIOR CIVIL.

Salaries, office of Secretary of the Interior, 1884:		
To George W. Evans		$159,510 00
Salaries, office of Secretary of the Interior, 1883:		
By George W. Evans	$308 34	
Contingent expenses, Department of the Interior, 1884:		
To George W. Evans		87,000 00
Deduct repayments:		
By George W. Evans	$15 74	
John D. Chesney	33 58	
	49 32	
		86,950 68
Contingent expenses, office of Secretary of the Interior, 1883:		
To George W. Evans		781 14
Deduct repayment:		
By George W. Evans		20 00
		761 14
Fuels, lights, &c., Department of the Interior, 1883:		
To George W. Evans		$133 33
Deduct repayment:		
By Richard Joseph		133 33
Publishing the Biennial Register:		
To George W. Evans		2,500 00
Deduct repayment:		
By George W. Evans		20
		2,499 80
Rent of buildings, Department of the Interior, 1884:		
To George W. Evans		48,760 00
Library, Department of the Interior, 1884:		
To George W. Evans		500 00
Stationery, Department of the Interior, 1884:		
To George W. Evans		62,000 00
Carried forward		62,000 00

Stationery, Department of the Interior, 1884—Continued.		
Brought forward		$62,000 00
Deduct repayments:		
By George W. Evans	$1,366 14	
W. W. Godding	287 81	
H. A. Gill	315 99	
Samuel Hamblen	24 75	
Department of the Interior	612 77	
John D. McChesney	1,277 89	
		3,885 35
		58,114 65
Stationery, Department of the Interior, 1883:		
To Geo. W. Evans		5,292 27
Deduct repayments:		
By George W. Evans	$818 31	
W. W. Godding	18 12	
H. A. Gill	177 84	
Department of the Interior	73 61	
John D. McChesney	256 61	
		1,344 52
		3,947 75
Stationery, Department of the Interior, 1882:		
To George W. Evans		39 20
Deduct from repayment:		
By George W. Evans		166 96
Excess of repayments		127 76
Postage, Department of the Interior. 1884:		
To Post-Office Department		28,000 00
Postage, Department of the Interior, 1883:		
To Post-Office Department		138 85
Postage, to Postal Union countries, 1884:		
To George W. Evans		2,500 00
Postage, to Postal Union countries, 1883:		
To George W. Evans		2,840 00
Deduct repayments:		
By George W. Evans	$78 76	
Richard Joseph	2 00	
		80 76
		2,759 24
Salaries General Land Office, 1884:		
To George W. Evans		416,650 00
Salaries General Land Office, 1883:		
By George W. Evans	$6,552 30	
Contingent expenses General Land Office, 1883:		
To Burlington and Missouri River R. R.		25 90
Baltimore and Ohio R. R.		17 50
Chicago and Northwestern Ry		14 30
Chicago and Alton R. R.		3 85
Chicago, Burlington and Quincy R. R.		14 30
Chicago, Rock Island and Pacific Ry		10 44
Denver and Rio Grande Ry		217 00
George W. Evans		3,120 59
Michigan Central R. R.		20 00
Missouri Pacific Ry		65 89
Carried forward		3,509 77

Contingent expenses, General Land Office, 1883—Continued.		
Brought forward		$3,509 77
To Oregon Railway and Navigation		31 30
Pennsylvania R. R.		41 50
Saint Louis and San Francisco Ry		7 45
Utah Central Ry		4 00
		3,594 02
Deduct from repayments:		
By Atchison, Topeka and Santa Fé R. R.	$95 05	
W. W. Burke	500 00	
Baltimore and Ohio R. R.	72 25	
Central Pacific Ry.	46 00	
John G. Evans	557 55	
A. R. Green	694 38	
C. W. Holcomb	849 96	
Richard Joseph	648 40	
Kansas Pacific R. R.	75 00	
Missouri Pacific Ry.	22 35	
Pennsylvania R. R.	97 75	
Union Pacific R. R.	60 50	
		3,719 19
Excess of repayments		125 17
Contingent expenses General Land Office, 1882:		
To Central Pacific R. R.		1 06
Saint Paul, Minneapolis and Manitoba Ry		11 30
		12 36
Deduct repayment:		
By George W. Evans		6 00
		6 36
Maps of the United States, 1884:		
To Julius Bien & Co.		373 75
George W. Evans		6,000 00
		6,373 75
Deduct repayment:		
By George W. Evans		373 75
		6,000 00
Expenses of inspectors General Land Office, 1884:		
To Howard B. Abbott		210 11
Atchison, Topeka and Santa Fé R. R.		147 94
Atlantic and Pacific R. R.		120 20
Baltimore and Ohio R. R.		123 65
Burlington and Missouri River R. R.		116 50
Chicago and Alton R. R.		31 50
Chicago and Eastern Illinois R. R.		7 10
Chicago and Northwestern Ry.		36 80
Chicago, Milwaukee, and Saint Paul Ry.		36 00
Chicago, Sanit Paul, Minneapolis and Omaha Ry.		21 60
Central Pacific R. R.		20 90
George H. Cline		32 87
Denver and Rio Grande Ry.		50 10
Denver, South Park and Pacific R. R.		15 00
John G. Evans		800 00
George W. Evans		3,000 00
Flint and Pere Marquette R. R.		2 70
A. R. Greene		1,500 00
Grand Rapids and Indiana R. R.		2 05
Carried forward		5,275 02

Expenses of inspectors General Land Office, 1884—Continued.
Brought forward $5,275 02
To C. W. Holcomb 500 00
F. D. Hobbs 293 16
Kansas City and Saint Joseph and Council Bluffs R. R.... 10 12
Kansas Pacific R. R..... 15 07
Louisville and Nashville R. R. 5 40
Michigan Central R. R..... 2 95
Milwaukee, Lake Shore and Western Ry..... 5 50
A. G. McKinsie..... 1,241 52
Missouri Pacific Ry 4 34
Memphis and Charleston R. R..... 20 15
Northern Pacific R. R..... 106 15
Ohio and Mississippi Ry..... 42 55
Oregon Railway and Navigation 13 85
Pennsylvania R. R..... 177 70
Saint Paul and Duluth R. R.. 2 00
Solomon R. R..... 1 72
Sioux City and Pacific R. R... 7 26
Savannah, Florida and Western Ry..... 24 50
Union Pacific R. R..... 98 10
Wilmington, Columbia and Augusta R. R..... 19 25
7,866 31

Library General Land Office, 1884:
To George W. Evans..... 1,000 00

General expenses Civil Service Commission, 1884:
To George W. Evans 3,500 00

General expenses Civil Service Commission, 1883:
To George W. Evans 1,740 33

Reproducing plats of surveys General Land Office, 1884:
To George W. Evans 20,373 75
Deduct repayment:
By Julius Bien & .Co..... 373 75
20,000 00

Reproducing plats of surveys General Land Office, 1883:
To George W. Evans 7,958 00
Deduct repayment:
By Richard Joseph..... 1,960 00
5,998 00

Publishing proclamations relating to sale of lands:
To Montgomery Advertiser 234 00
The Pioneer Press 370 12
604 12

Packing, &c., Congressional documents, 1883:
By Richard Joseph $0.87

Salaries office Commissioner of Indian Affairs, 1884:
To George W. Evans 88,620 00

Salaries office of Commissioner of Indian Affairs, 1883:
By George W. Eyster.. $16 51

Salaries temporary clerks, office of Commissioner of Indian Affairs, 1884:
To George W. Evans..... 7,100 00

Salaries temporary clerks, office of Commissioner of Indian Affairs, 1883 and 1884:
To George W. Evans $425 95
Deduct repayment:
By George W. Evans..... 126 40
299 55

Rent of additional buildings Department of the Interior:
By George W. Evans.. $6 68

Salaries office of Commissioner of Railroads, 1884:
To George W. Evans..... 14,620 00

Salaries office of Commissioner of Railroads, 1883:
To George W. Evans..... 150 10
Deduct from repayment:
By Richard Joseph 199 71
Excess of repayment 49 61

Contingent expenses office Commissioner of Railroads, 1883:
To George W. Evans 22 47
Deduct from repayment:
By George W. Evans..... 26 24
Excess of repayment..... 3 77

Traveling expenses office of Commissioner of Railroads, 1884:
To George W. Evans 3,000 00

Traveling expenses office of Commissioner of Railroads, 1883:
By George W. Evans . $422 30

Salaries office of Bureau of Education, 1884.
To George W. Evans..... 44,480 00

Salaries office of Commissioner of Education, 1883:
By George W. Evans .. $235 86

Contingent expenses office of Commissioner of Education, 1882:
To George W. Evans..... 780 00

Collecting statistics Bureau of Education, 1884:
To George W. Evans..... 1,600 00

Distributing documents Bureau of Education, 1884:
To George W. Evans..... 2,000 00

Distributing documents Bureau of Education, 1883:
By George W. Evans.. $0 23

Distributing documents Bureau of Education, 1882:
To George W. Evans..... 53 00

Library Bureau of Education, 1884:
To George W. Evans..... 1,675 00

Salaries office of Commissioner of Pensions, 1884:
To George W. Evans..... 1,926,550 00

Salaries office of Commissioner of Pensions, 1883:
To George W. Evans 10,093 95
Deduct repayment:
By George W. Evans..... 482 30
9,611 65

Contingent expenses office of Commissioner of Pensions, 1883:
To George W. Evans $3 93
Deduct from repayment:
By George W. Evans 8 51
Excess of repayment 4 58

Investigations of pension cases office of Commissioner of Pensions, 1884:
To George W. Evans 333,000 00

Investigation of pension cases office of Commissioner of Pensions, 1882:
To George W. Evans 527 00

Salaries office of Commissioner of Patents, 1884:
To George W. Evans 535,730 00

Salaries office of Commissioner of Patents, 1883:
By George W. Evans ... $3,224 73

Contingent expenses office of Commissioner of Patents, 1883:
To George W. Evans 50
Deduct from repayment:
By George W. Evans 4 31
Excess of repayment 3 81

Scientific library office of Commissioner of Patents, 1884:
To George W. Evans 5,000 00

Plates for Patent Office Official Gazette, 1884:
To George W. Evans 35,000 00

Plates for Patent Office Official Gazette, 1883:
By George W. Evans ... $0 60

Photolithographing, office of Commissioner of Patents, 1884:
To George W. Evans 67,00 00

Photolithographing, office of Commissioner of Patents, 1883:
By George W. Evans .. $0 08

Copies of drawings, office of Commissioner of Patents, 1883:
To George W. Evans 200 94
Deduct from repayment:
By George W. Evans 201 21
Excess of repayment 27

Illustrations of Patent Office Report for 1870:
To George W. Evans 189 25

Salaries, office of Architect of the Capitol, 1884:
To George W. Evans 17,644 00

Salaries, office of Architect of the Capitol, 1883:
To R. Joseph 1,034 90
Deduct repayment:
By George W. Evans 443 03
591 87

Salaries of employés under Architect of the Capitol, 1882:
To Richard Joseph 2 00

Salaries, office of Geological Survey, 1884:
To John D. McChesney $34,923 32

Salaries, office of Geological Survey, 1883:
By John D. McChesney $49 50

Salaries office of surveyor-general of Arizona, 1884:
To Royal A. Johnson 3,199 21
J. W. Robbins 3,050 00
6,249 21
Deduct repayment:
By J. W. Robbins 1,353 50
4,895 71

Salaries, office of surveyor-general of Arizona, 1883:
By J. W. Robbins $90 21

Contingent expenses, office of surveyor-general of Arizona, 1884:
To Royal A. Johnson 918 25
J. W. Robbins 750 00
1,668 25
Deduct repayment:
By J. W. Robbins 168 25
1,500 00

Contingent expenses, office of surveyor-general of Arizona, 1883:
By J. W. Robbins $2 19

Salaries, office of surveyor-general of California, 1884:
To W. H. Brown 35,000 00

Salaries, office of surveyor-general of California, 1883:
By W. H. Brown $12 09

Contingent expenses, office of surveyor-general of California, 1884:
To W. H. Brown 3,000 00

Contingent expenses, office of surveyor-general of California, 1883:
By W. H. Brown $15 11

Salaries, office of surveyor-general of Colorado, 1884:
To N. H. Meldrum 9,000 00

Salaries office of surveyor-general of Colorado, 1883:
By Norman H. Meldrum $0 52

Contingent expenses office of surveyor-general of Colorado, 1884:
To N. H. Meldrum 1,500 00

Salaries office of surveyor-general of Dakota, 1884:
To Cortez Fessenden 11,400 00

Salaries office of surveyor-general of Dakota, 1883:
By Cortez Fessenden ... $1 32

Contingent expenses office of surveyor-general of Dakota, 1884:
To Cortez Fessenden 2,000 00

Salaries office of surveyor-general of Florida, 1884:
To Malachi Martin 4,800 00

Salaries office of surveyor-general of Florida, 1883:
By M. Martin..... $0 25

Contingent expenses office of surveyor-general of Florida, 1884:
To Malachi Martin $1,000 00

Contingent expenses office of surveyor-general of Florida, 1883;
By M Martin $0 12

Salaries office of surveyor-general of Idaho, 1884:
To William P. Chandler 5,000 00

Contingent expenses office of surveyor-general of Idaho, 1884:
To William P. Chandler..... 1,500 00

Salaries office of surveyor-general of Louisiana, 1884;
To James Lewis..... 15,800 00

Salaries office of surveyor-general of Louisiana, 1883:
To J. A. Gla..... 117 04
James Lewis..... 24 54
141 58
Deduct repayment:
By J. A. Gla 36 21
105 37

Contingent expenses office of surveyor-general of Louisiana, 1884:
To James Lewis 1,000 00

Contingent expenses office of surveyor-general of Louisiana, 1883:
To James Lewis 70
Deduct repayment:
By J. A. Gla..... 70

Salaries office of surveyor-general of Minnesota, 1884;
To Martin S. Chandler 10,000 00

Salaries office of surveyor-general of Minnesota, 1883:
To J. H. Stewart..... 5 49
Deduct from repayment:
By Martin S. Chandler..... 103 95
Excess of repayment.... 98 46

Contingent expenses office of surveyor-general of Minnesota, 1884:
To Martin S. Chandler..... 1,000 00

Contingent expenses, office of surveyor-general of Minnesota, 1883:
By Martin S. Chandler. $83 67

Salaries, office of surveyor-general of Montana, 1884:
To John S. Harris..... 10,500 00

Salaries, office of surveyor-general of Montana, 1883:
By John S. Harris..... $1 39

Contingent expenses, office of surveyor-general of Montana, 1884:
To John J. Harris..... 2,000 00

Salaries, office of surveyor-general of Nebraska and Iowa, 1884:
To D Y. Stephenson 6,000 00

Salaries, office of surveyor-general of Nebraska and Iowa, 1883:
To D. V. Stephenson $14 56
Deduct from repayments:
By D. V. Stephenson... $17 62
George S. Smith.... 14 56
32 18
Excess of repayments.... 17 62

Contingent expenses, office of surveyor-general of Nebraska and Iowa, 1884:
To D. V. Stephenson..... 1,500 00

Contingent expenses, office of surveyor-general of Nebraska and Iowa, 1883:
To D. V. Stephenson..... 42 68
Deduct repayment:
By George S. Smith..... 42 68

Salaries, office of surveyor-general of Nevada, 1884:
To C. C. Powning..... 5,500 00

Salaries, office of surveyor-general of Nevada, 1883:
By C. C. Powning $8 63

Contingent expenses, office of surveyor-general of Nevada, 1884:
To C. C. Powning..... 1,500 00

Salaries, office of surveyor-general of New Mexico, 1884:
To H. M. Atkinson 8,500 00

Contingent expenses, office of surveyor-general of New Mexico, 1884:
To H. M. Atkinson 1,500 00

Salaries, office of surveyor-general of Oregon, 1884:
To James C. Tolman 7,000 00

Contingent expenses, office of surveyor-general of Oregon, 1884:
To James C. Tolman..... 1,500 00

Contingent expenses, office of surveyor-general of Oregon, 1883:
By James C. Tolman... $255 35

Salaries, office of surveyor-general of Utah, 1884:
To Frdk. Salomon..... 5,500 00

Contingent expenses, office of surveyor-general of Utah, 1884:
To Frdk. Salomon..... 1,500 00

Contingent expenses office of surveyor-general of Utah, 1882:
By Frdk. Salomon $32 23

Salaries, office of surveyor-general of Wyoming, 1884:
To Edward C. David..... $6,000 00

Salaries of surveyor-general of Wyoming, 1882:
By E. C. David $2 41

Contingent expenses, office of surveyor-general of Wyoming, 1884:
To Edward C. David..... 1,500 00

Salaries, office of surveyor-general of Wyoming, 1881 and prior years:
By E. C. David $0 83

1883–'84. INTERIOR CIVIL.

Salaries, office of surveyor-general of Washington, 1884:
To W. McMicken $8,000 00

Contingent expenses, office of surveyor-general of Washington, 1884:
To W. McMicken 1,500 00

Expenses of taking the census of the Territory of Minnesota, act February 26, 1857:
By W. B. Gere $1,000 00

Annual repairs of the Capitol, 1884:
To George W. Evans 54,400 00

Annual repairs of the Capitol, 1883:
To George W. Evans 666 57
Deduct from repayment:
By R. Joseph 735 00
Excess of repayment 68 43

Improving the Capitol grounds, 1884:
To George W. Evans 65,000 00

Improving the Capitol grounds, 1883:
By George W. Evans $0 69

Lighting the Capitol grounds, 1884:
To George W. Evans 28,000 00

Lighting the Capitol grounds, 1883:
By George W. Evans $0 01

Senate stable and engine-house, 1884:
To George W. Evans 100 00

Senate stable and engine-house, 1883:
By George W. Evans .. $2 41

Fire-proof building for the Pension Office:
To George W. Evans 185,000 00
R. Joseph 1,596 34
186,596 34
Deduct repayment:
By Richard Joseph 100 00
186,496 34

Reconstructing Interior Department building:
To George W. Evans 60,000 00
Deduct repayment:
By George W. Evans 4,000 00
56,000 00

Repairs of building, Department of the Interior, 1884:
To George W. Evans 5,780 00

Repairs of building, Department of the Interior, 1883:
To George W. Evans 780 00

Buildings and grounds, Howard University:
To J. B. Johnson 3,500 00

Buildings and grounds, Government Hospital for the Insane:
To W. W. Godding 30,481 72

Buildings and grounds, Columbia Institution for the Deaf and Dumb:
To E. M. Gallaudet 3,000 00

Penitentiary building, Territory of Dakota:
To Wallace L. Dow $2,000 00
Martin & Anderson 1,080 00
N. G. Ordway 271 70
Stratton & Polk 4,253 12
F. W. Taylor 881 00
8,485 82

Extension of Government Printing Office:
To George W. Evans 550 95

Elevators and steam machinery, United States Senate, 1883:
To George W. Evans 494 67

Enlarging court-house, Washington, D. C.:
To Richard Joseph 338 09
Deduct from repayment:
By George W. Evans 338 19
Excess of repayment 10

Current expenses Government Hospital for the Insane, 1884:
To W. W. Godding 202,500 00

Current expenses Government Hospital for the Insane, 1883:
To W. W. Godding 25,000 00
Deduct repayment:
By W. W. Godding 20
24,999 80

Current expenses Government Hospital for the Insane, 1881 and prior years:
By W. W. Godding $0 50

Current expenses Columbia Institution for the Deaf and Dumb, 1884:
To E. M. Gallaudet 55,000 00

Support of Freedmen's Hospital and Asylum, 1884:
To Geo. W. Evans 46,500 00

Support of Freedmen's Hospital and Asylum, 1883:
To Geo. W. Evans 171 63

Howard University, Washington, D. C., 1884:
To J. B. Johnson 15,000 00

Additional accommodations Government Hospital for the Insane:
To W. W. Godding 46,000 00

Fire apparatus, Government Printing Office and Hospital for the Insane, 1883:
To Geo. W. Evans 1,000 00
Deduct repayment:
By Geo. W. Evans 314 91
685 09

Maryland Institution for Instruction of the Blind:
To Maryland Institution for Instruction of the Blind 6,791 33

Preservation of collections National Museum, 1884:
To Geo. W. Evans 95,000 00

Preservation of collections National Museum, 1883:		
To Geo. W. Evans	$5,830 94	
Richard Joseph	1,281 88	
		7,112 82
Preservation of collections National Museum, Armory building, 1884:		
To Geo. W. Evans	2,500 00	
		2,500 00
Preservation of collections National Museum, Armory building, 1883:		
To Geo. W. Evans	120 17	
Deduct repayment:		
By Richard Joseph	120 17	
		120 17
Furniture and fixtures National Museum, 1884:		
To Geo. W. Evans	58,000 00	
		58,000 00
Furniture and fixtures National Museum, 1883:		
To Geo. W. Evans	1 00	
Deduct repayment:		
By Geo. W. Evans	1 00	
		1 00
Heating apparatus, building for the Pension Office, 1884:		
To Geo. W. Evans	2,500 00	
		2,500 00
Repairs adobe palace, New Mexico, 1884:		
To W. G. Rich	600 00	
		600 00
Expenses of the Tenth Census:		
To Geo. W. Evans	130,043 46	
R. Joseph	73 79	
		130,117 25
Protection and improvement of Yellowstone National Park, 1884:		
To P. H. Conger	40,000 00	
		40,000 00
Protection and improvement of Yellowstone National Park, 1884:		
To P. H. Conger	95 28	
		95 28
Protection and improvement of Yellowstone Nrtional Park, 1882:		
By P. H. Conger	$95 28	
Expenses of the Tenth Census, printing and engraving, 1883:		
To Richard Joseph	3,810 08	
		3,810 08
Expenses of the Tenth Census, printing and engraving, 1882:		
By Geo. W. Evans	$133 53	
Settlement of claims for swamp lands and swamp-land indemnity, 1884:		
To Chicago and Northwestern Rwy	3 69	
Chicago, Rock Island and Pacific Rwy	3 08	
Geo. W. Evans	14,600 00	
Florida Central and Western R. R	7 75	
Hannibal and Saint Joseph R. R	7 50	
Indiana and Illinois Southern R. R	1 50	
Illinois Central R. R	11 53	
Kansas City, Saint Joseph and Council Bluffs R. R	6 21	
Missouri Pacific Rwy	90 55	
Ohio and Mississippi Rwy	20 25	
Robert L. Ream	180 41	
Carried forward		14,932 47

Settlement of claims for swamp lands and swamp-land indemnity, 1884—Continued.		
Brought forward		$14,932 47
To Saint Louis and San Francisco Rwy		20 50
Wabash, Saint Louis and Pacific Rwy		30 30
		14,983 27
Settlement of claims for swamp lands and swamp-land indemnity, 1883:		
To Chicago, Burlington and Quincy R. R		13 71
Central Pacific R. R		85
Geo. W. Evans		1,820 27
Florida Central and Western R. R		7 75
Illinois Central R. R		3 20
Missouri Pacific Rwy		3 75
Pennsylvania R. R		64 75
Saint Louis and San Francisco Rwy		9 40
Wabash, Saint Louis and Pacific Rwy		2 00
		1,925 68
Deduct from repayments:		
By Geo. W. Evans	$386 34	
Richard Joseph	1,786 41	
		2,172 75
Excess of repayments		247 07
Protection and improvement of Hot Springs, Ark.:		
To F. V. Abbott		75 83
Geo. H. Bardwell		53,595 94
Geo. W. Evans		2,639 20
Samuel Hamblen		1,649 87
		57,960 84
Improvement of Hot Springs Reservation, Arkansas, 1883:		
To Geo. H. Bardwell		33,178 32
Deduct repayment:		
By Geo. W. Evans		1,648 72
		31,529 60
Surveying the public lands, 1882:		
To John P. Apthorp		1,891 10
Russell L. Dunn		322 00
Thomas Graham		1,373 14
Chas. A. Honey		1,584 03
F. Von Leicht		4,058 54
Rufus S. Moore		2,650 91
W. O. Owen		9,067 28
Geo. R. Stuntz		1,137 98
Lewis D. W. Shelton		219 28
Geo. Sanborn		177 30
		22,481 56
Surveying the public lands, 1883:		
To Atlantic and Pacific R. R		15 40
Atchison, Topeka and Santa Fé R. R		77 25
John P. Apthorp		623 49
Henry E. Allen		476 03
James M. Anderson		3,681 56
Geo. K. Bradford		3,063 22
Robt. Berry		281 42
James L. Bradford		6,830 08
D. G. Bell and F. Bell		8,659 17
A. B. Beauvais		91 86
Chas. H. Bates		3,039 98
James T. Berry		4,191 05
Chas. W. Brown		222 40
Geo. G. Beardsley		2,130 09
Carried forward		33,283 10

Surveying the public lands, 1883—Continued.	
Brought forward	$33,383 10
To Darius F. Baker	1,686 56
Curtis & Libby	8,098 35
Central Pacific R. R	38 78
Chapman & Thompson	4,086 33
Chicago and Alton R. R	16 80
W. D. Chapman and J. P. Thompson	3,976 91
Henry W. Cooper	5,000 00
John C. Dunlap	90 06
Jno. B. David	5,371 85
L. S. Dunscomb	44 89
Denver and Rio Grande R. R.	48 30
Richmond S. Dickerson	1,975 24
Ferdinand Dickert	4,428 92
Geo. W. Evans	3,232 31
Augustus D. Ferron	5,951 73
David E. Folsom	1,935 79
Fahringer & Cromwell	4,038 46
Samuel C. Flint	855 54
Jno. O. Fries	377 23
Geo. W. Fairfield	4,158 38
Fowler & Fahringer	1,868 74
Philip M. Gallaher	8,756 55
Geo. Gardiner	7,543 95
Herman D. Gradon	1,615 22
Geo. F. Hamilton	2,590 10
Chas. Holcomb	4,126 57
A. T. Herman	1,326 92
James K. Hull	7,119 40
Oliver B. Iverson	1,522 18
F. F. Johnson	3,781 43
B. K. Kimberly	340 08
J. B. Loomis	25 00
A. A. Mabson	705 40
Michigan Central R. R	113 75
James P. Maxwell	3,863 31
Thos. F. Marshall	1,723 75
Jewett McPherson	2,545 81
Stephen C. McElroy	2,097 13
Diehl, McBrown & Grapp	6,054 29
John B. Moore	6,028 54
J. B. McLaughlin	3,259 60
Jno. A. McQuinn	1,963 26
John W. Meldrum	948 90
Geo. Mercer	1,341 80
New York, Lake Erie and Western R. R	20 25
Ignatus A. Navarre	2,379 70
P. M. Norboe	3,001 62
Daniel C. Oakes	3,041 64
Geo. S. Oliver	1,492 21
John P. Parsons	1,511 18
Palmer & Mellen	299 87
Penn. R. R	6 50
Edward Palmer and Albert Mellen	2,112 66
Edward D. Palmer	1,846 51
Rodney W. Page	9,502 74
Jno. L. Propst	4,398 73
Thos. Ross	2,073 25
Oscar E. Rea	3,385 27
M. F. Reilly	7,502 92
Geo. H. Robinson	4,268 25
Chas. W. Sawyer	4,870 70
Geo. R. Stuntz	579 09
Chas. E. Sears	2,227 13
Stewart & Morrison	4,010 39
C. W. Sanborn	330 25
Geo. Sandow	2,230 86
Cassius, M. C., Snover and Edward J. Snover	5,152 01
Benj. H. Smith	1,014 30
Andrew J. Stewart	3,031 31
Andrew J. Stewart, jr	605 76
Tyler & Medary	1,957 19
C. Alex. Trease	2,912 68
Edward C. Towne	5,824 90
J. Alex. Tyler	1,136 59
John B. Treadwell	374 80
Union Pacific R. R	123 05
Carried forward	243,281 52

Surveying the public lands, 1883—Continued.	
Brought forward	$243,281 52
To Virginia Midland Rwy	22 05
Chas. A. Wheeler	2,917 46
	246,221 03
Deduct repayment:	
By Cortez Fessenden	57 25
	246,163 78
Surveying the public lands, 1884:	
To H. J. Austin and H. D. Brown	2,399 11
Atchison, Topeka and Santa Fé R. R	90 70
H. E. Allen	2,750 00
Casey S. Alverson	223 00
Alabama Great Southern R. R.	22 05
W. J. Austin and H. D. Brown	3,842 59
James M. Anderson	1,500 39
De Kalb Ashley	5,171 83
Geo. G. Beardsley	6,179 55
Burlington and Missouri River R. R	156 60
B. C. Bonnell	15 77
Chas. H. Bates	2,014 00
Geo. K. Bradford	1,104 58
Miles W. Bullock	148 75
A. B. Beauvais	84 00
Wm. B. Barr	3,195 99
Edward D. Bright	1,693 68
Chicago and Alton R. R	2 50
Chicago, Milwaukee and Saint Paul Rwy	51 60
Geo. M. Crocken and Geo. H. Robinson	3,761 13
Levi H. Cannon	5,791 54
G. W. Conkling, jr., and T. K. Stewart	6,400 00
Chicago and Grand Trunk Rwy	6 15
Central Pacific Rwy	29 92
Henry W. Cooke	5,418 32
Geo. M. Carson	1,245 46
Cortez Fessenden	500 00
Denver and Rio Grande Rwy.	266 70
Chas. E. Davis	2,898 55
Geo. Evans	30,000 00
Ole Eliasson	20 00
Henry Fitzhugh	1,748 55
Hiram C. Fellows	4,495 81
Samuel C. Flint	1,081 75
David E. Folsom	3,344 91
Frank Follman	8,946 23
Augustus D. Ferron	4,957 79
W. H. Goucher	500 00
Georgia Pacific Rwy	3 80
Geo. W. Garside	1,026 23
E. F. Guild	32 85
Philip M. Gallaher	4,387 74
Jno. S. Harris	125 90
Henry C. F. Hockbusch	4,245 14
Dudley S. B. Henry	2,561 95
G. T. Hamilton	886 42
Illinois Central R. R	2 00
Jones & Sarvin	7,935 28
Anton Karl	47 75
Murray Knowles	10 00
Kansas Pacific Rwy	26 48
Louisville and Nashville R. R.	11 80
Chas. D. Lawton	40 00
W. McMicken	3,000 00
O. P. McMains	119 08
Jno. N. Mellen	9,382 0
E. B. Moore and E. C. McClellan	5,878 43
Wm. Mirre	10 00
O. Mulvey	25 00
Clark H. Millikan	3,399 14
Michigan Central R. R	15 00
James L. Mann	9,413 39
John J. Major	233 45
Carried forward	164,878 63

Surveying the public lands, 1884—Continued.		
Brought forward		$164,878 63
To New York Central & Hudson River R. R		61 20
Northern Pacific R. R		48 50
P. M. Marboe		3,786 67
Wm. Q. Owen		819 26
D. C. Oakes		3,846 03
Pennsylvania R. R		183 25
Edward D. Palmer		1,200 41
Palmer & Mellen		3,641 75
Geo. W. Phillips		4,244 54
John L. Propst		5,000 00
Edwin R. Parks		25 00
Edwin Richardson		4,992 48
Geo. H. Robinson		1,205 20
D. A. Russell		15 00
A. H. Reed		18 01
Stevenson & Cutshaw		5,191 85
Cassius, M. C., and E. J. Snover		4,688 67
Edward F. Stahle		1,089 10
Benj. H. Smith		1,473 38
Chas. Scott		7,331 81
Otis Shinn		4,895 06
J. T. Smith		9,904 28
Andrew J. Stewart, jr		3,000 00
Thos. K. Stewart		1,455 30
Elmer C. Towne		2,246 45
J. B. Treadwell		869 83
L. L. Thompson		191 70
Union Pacific R. R		245 43
Utah Central Rwy		2 00
Virginia Midland Rwy		24 50
P. H. Von Diest		29 90
F. Von Leicht		490 30
Miles T. Wooley		1,642 46
Warner & Armstrong		10,000 00
Wm. P. Wright		1,705 19
Geo. E. Williamson		1,316 53
Chas. A. Wheeler		4,138 41
		255,898 08
Surveying private land claims in Arizona, 1884:		
To Royal A. Johnson		4,131 53
J. W. Robbins		4,000 00
		8,131 53
Deduct repayment:		
By J. W. Robbins		1,206 53
		6,925 00
Surveying private land claims in Arizona, 1883:		
By J. W. Robbins	$21 98	
Surveying private land claims in California, 1884:		
To W. H. Brown		6,000 00
Central Pacific R. R		49
		6,000 49
Deduct repayment:		
By James McFadden		730 50
		5,269 99
Surveying private land claims in California, 1883:		
To Central Pacific R. R		4 30
Wm. Minto		564 50
Tribune Publishing Company		6 00
		574 80
Deduct from repayments:		
By W. H. Brown	$73 81	
Miguel Leonis	1,018 99	
		1,092 80
Excess of repayments		518 00
Surveying private land claims in California, 1882:		
By Albert Dibble	$217 00	
Surveying private land claims in New Mexico, 1884:		
To H. M. Atkinson		$4,500 00
Surveying private land claims in New Mexico, 1883:		
To John Shaw		2,690 83
Surveying private land claims in New Mexico, 1882:		
To Wm. Mailand		571 21
Geological Survey, 1883:		
To Atchison, Topeka and Santa Fé R. R		25 49
Atlantic and Pacific Rwy		10 66
Central Pacific R. R		474 72
Kansas Pacific Rwy		8 35
Jno. D. McChesney		3,603 74
Missouri Pacific R. R		151 27
Union Pacific R. R		354 75
Utah Central Rwy		59 40
Wabash, Saint Louis and Pacific Rwy		12 25
		4,700 63
Deduct repayment:		
By P. H. Christie	$132 95	
G. K. Gilbert	916 20	
Jno. D. McChesney	38 66	
		1,117 81
		3,582 82
Geological Survey, 1884:		
To Atchison, Topeka and Santa Fé R. R		5 64
Sumner H. Bodfish		4,889 32
G. F. Becker		10,792 55
P. H. Christi		31,000 00
Central Pacific R. R		1,340 54
G. K. Gilbert		12,500 00
Arnold Hague		15,850 00
Kansas Pacific Rwy		20 83
Jno. D. McChesney		179,000 00
Missouri Pacific Rwy		8 00
Alfred M. Rogers		23,000 00
Jno. H. Renshaw		6,333 23
Henry C. Rizer		10,000 00
Gilbert Thompson		8,000 00
Sioux City and Pacific R. R		10 47
Union Pacific R. R		898 23
		303,648 81
Deduct repayments:		
By G. K. Gilbert	$610 90	
Jno. H. Renshaw	35 60	
		646 50
		303,002 31
Surveying boundary line, Crow Indian lands, 1883:		
To John T. Blake		4,800 00
Surveying agricultural lands, Crow Indian Reservation:		
To John T. Blake		14,723 70
Deposits by individuals for surveying public lands:		
To Allen M. Armstrong		932 81
H. M. Atkinson		12,644 80
Josephus Alley		1,478 08
James W. Abbott		50 00
V. B. Allen, Chas. Ruff, and S. C. Lewis		60 00
C. W. Armstrong		950 00
James M. Anderson		194 71
Carried forward		16,310 40

Deposits by individuals for surveying public lands—Continued.	
Brought forward	$16,310 40
To Ebenezer Archibald	2,583 00
Austin & Brown	1,200 00
Peter Bouguin	22 50
Geo. W. Baker	23,216 49
W. H. Brown	7,000 00
T. and D. G. Bell	717 39
J. P. Bassler	22 50
Belmont Consolidated Mining Co	22 50
W. L. Berdan	19,042 19
Newell J. Burnham	25,817 66
Thos. C. Bailey	33 92
Geo. G. Beardsley	1,280 21
Wm. H. H. Beadle	2,837 90
Wm. F. Benson	7,088 81
A. B. Beauvais	1,114 19
B. F. Bivens	150 00
J. E. Baumberger	27 00
H. E. Buckley	9,440 44
Wm. H. Byars	3,026 71
Henry Bucholsand O. C. Green	30 00
W. J. Boland	6,887 28
Theo. Bings	6,318 24
Alexander Barnett	1,472 89
Wm. B. Barr	900 00
Alex. H. Beattie	25 00
Frank Buckley	2,840 52
Chas. H. Bates	461 64
James M. Boggs	4,832 00
Frank R. Carpenter	112 50
Calvin P. Clark	25 00
Wm. P. Chandler	4,400 00
Curry & Jones	1,692 64
L. T. Cooper	59 95
Thos. J. Cruse	50 00
James P. Currin	3,183 03
Jno. A. Curtis	9,818 94
Henry A. Coe	7,200 00
A. Leon Crevantes	1,326 16
Consolidated Grand View Mining Co	22 50
Martin S. Chandler	440 00
Neil P. Christiansen	210 58
R. C. Chambers	27 00
David R. Cunningham	8,396 69
E. A. Carter	8,119 94
G. M. Carson	6,617 96
Geo. S. Collins	14,907 86
Frank W. Campbell	6,845 85
C. W. Clarke	8,501 91
Wm. H. Doe	25 00
Edward C. David	29,665 17
Jno. W. Dewey	48 51
Chas. R. Drake	150 00
James E. Dike	5,616 06
Chas. W. Dakin	10,143 84
Wm. O. Downey	18,306 49
James H. Doyle	343 00
Geo. W. Davidson	57 00
Sigmund Deutch	165 00
Edwin R. Durston	156 78
John C. Dunlap	35 73
Diehl, McBrown & Gripp	3,282 72
Dorsett & Whitehead	60 00
Downsey & Grant	962 99
John Engnssor	84 00
Albert F. Easley	3,010 00
John Elbert	80 00
Ora M. Enslow	109 64
Easley & Easley	7,542 15
Sylvester F. Everett	15 00
Easley & Mailand	8,883 68
Chas. J. Fox	23 42
Cortez Fessenden	5,200 00
Henry Fitzhugh	2,045 22
W. R. Fitzgerald	6,476 46
S. W. Foreman	1,338 76
John W. Fitzpatrick	8,524 71
Augustus D. Ferron	3,068 43
Frank Follman	9,703 07
Carried forward	351,802 72

Deposits by individuals for surveying public lands—Continued.	
Brought forward	$351,802 72
To David W. Fleet	4,451 49
Harvey P. Fry	2,420 00
L. B. Gorham	1,988 52
Mortimer N. Grant	11,766 95
W. & L. E. Gurley	180 00
Phillip M. Gallaher	1,919 96
Gem City Mining Company	22 50
J. R. Glover	1,355 50
Wm. Hunn	4,129 62
Alva M. Holt	4,104 00
Jno. S. Harris	7,550 00
Chas. Herman	1,607 03
John Haughn	1,740 27
R. T. Herrick	227 23
Chas. Holcomb	25,086 12
Geo. H. Hill	959 58
J. B. Hoggin	60 00
John D. Hall	5,374 28
Chas. A. Honey	24,733 78
Hardy & Lindsey	14,259 54
Chas. J. Howard	77 68
Ernst. H. Hesse	1,385 08
James L. Hill	22 50
John H. Husted	22 50
D. M. Hill	1,156 29
Ewing K. Henderson	6,958 63
D. F. Hickey	1,951 68
Oscar L. Hamery	422 51
A. T. Hermann	871 21
Thos. S. Holland	1,572 78
Holcomb & Wood	303 83
Hall & Frankberger	1,021 45
Jno. W. Irion	1,858 23
John E. Jackson	74 07
Adolph Jessen	30 80
Stephen Jackson	7,214 82
A. P. Johnson	19,022 92
Royal A. Johnson	5,932 84
Jones & McLaughlin	4,161 08
Geo. A. Kline	6,952 49
Kenffel & Esser	180 00
G. E. Kentner	9,120 00
Albert B. Knight	181 18
John Keeney	35 00
Edward W. Koeber	1,193 00
Frank Koons	1,328 78
Chas. Keemle	192 40
Jno. Leahy	22 50
Anthony Ludlum, jr	1,277 45
Lampton & Briggs	17,138 29
Mark D. Libby	1,958 00
Reuben R. Leigh	4,444 72
E. A. La Peire	12,549 57
Samuel W. Lackland	3,539 99
Jas. R. Morrison	784 50
Henry Meldrum	9,368 65
John A. McQuinn	13 51
W. L. Marcy	100 00
Jesse F. McDonald	50 00
Rufus S. Moore	14,479 50
W. McMicken	2,625 37
N. H. Meldrum	41,000 00
Henry Meirick	847 25
E. G. McCollum	20 00
Jno. L. McCoy	10,088 61
Jno. H. McNee	8,619 07
McBrown, Gripp & Spring	1,739 48
James P. Maxwell	75 00
T. A. Magee	12,718 44
Jewett McPherson	2,037 98
Thos. F. Marshall	5,074 96
Wm. Mailand	2,742 00
Thos. Minott	975 00
Maxwell & Dewey	50 00
Andrew J. Myers	275 00
Wm. Minto	1,156 93
R. H. McDonald	12,720 68
D. G. Miller	50 00
John W. Meldrum	463 13
John N. Mellen	2,903 70
Carried forward	710,892 12

Deposits by individuals for surveying public lands—Continued.		
Brought forward	$710,892 12	
To Henry Myrick, jr	9,000 00	
W. H. Myrick	15,550 66	
Moore & Fisher	5,067 97	
Henry F. McClure	6,775 31	
Walter G. Mavmon	1,025 00	
Geo. Miller	2,605 43	
W. H. Norway	9,101 29	
Walter B. Neil	4,192 00	
Geo. D. Nichel	4,048 01	
W. O. Owen	10,307 97	
Louis Ouellette	3,134 98	
Samuel Parker	281 00	
C. F. Putnam	24,913 08	
Henry Pierce	7,197 77	
James M. Page	545 10	
Pearce & Coleman	7,501 47	
C. C. Powning	3,528 27	
Henry C. Perkins	7,051 25	
E. D. Palmer & Albert Miller	897 91	
James E. Porter	5,255 49	
Geo. H. Perrin	13,217 96	
W. H. Proctor	17,532 23	
Wencel H. Plachy	7,982 20	
Robt. J. Perry	23 91	
Frederick W. Pahmish	148 82	
Thos. Ross	618 37	
J. W. Robbins	7,500 00	
M. F. Reilly	8,105 47	
James L. Rumsey	6,464 58	
Shach M. Richardson	1,247 77	
S. G. Rhodes	50 00	
Geo. J. Roskruge	137 97	
Herbert P. Rolfe	542 69	
David D. Rogers	150 00	
Geo. H. Robinson and Henry M. Crocken	3,065 37	
Jno. L. Rousseau	25 00	
W. F. Simpson	30 00	
Scott & Sturtevant	8,276 48	
D. V. Stephenson	2,893 10	
F. Salomon	7,123 98	
Stine & Libby	2,442 82	
Lewis F. Stahle	16,678 74	
Joseph B. Shelby	10,418 23	
Edward D. Stone	6,651 65	
Milton Santee	1,773 78	
Henry E. Simons	3,527 54	
Sawyer & Harding	7,424 59	
Edward F. Stahle	61,994 78	
C. M. C. & E. Snover	599 44	
Wm. H. Stevens	80 00	
Summit Fund and Mining Company	27 50	
O. N. Sanford	35 96	
Robt. R. Sterling	50 00	
Geo. R. Stuntz	1,705 68	
J. F. Smith	561 00	
S. C. Stone	10 00	
Geo. Sandow	6,347 32	
Thos. Shaw	274 03	
Chas. W. Sawyer	2,253 45	
H. J. Stevenson	238 94	
Taylor & Fuss	7,204 06	
James C. Tolman	8,000 00	
Taylor & Holland	3,243 29	
Thomas & Manning	1,702 62	
Tilden Mining Company	25 00	
Wm. M. Turner	832 48	
Unrugh & Warner	220 78	
Edwin H. Van Antwerp	4,958 57	
Chas. L. Work	22 50	
Orville D. Wheeler	9,600 00	
F. S. Wood	3,985 21	
B. Clark Wheeler	100 00	
R. H. Woods	16,269 76	
Mills T. Wooley	5,794 89	
F. G. Ward	551 75	
F. W. Weisshaar	7,909 61	
Geo. E. Williamson	420 00	
Wm. White	2,423 56	
Carried forward	1,120,367 51	

Deposits by individuals for surveying public lands—Continued.		
Brought farward	$1,120,367 51	
To Wm. P. Wright	1,398 00	
Laban H. Wheeler	2,805 74	
F. W. Weisshaar, jr	1,513 ,5	
Chas. A. Wheeler	50 00	
John W. Wade	154 62	
Theodore F. White	383 33	
	1,126,672 35	
Deduct repayments:		
By E. S. Davis	$3,120 35	
Cortez Fessenden	689 49	
J. A. Gla	1 09	
Albert Johnson	1,684 78	
J. W. Robbins	3,282 84	
Geo. S. Smith	444 90	
Fred. Salomon	1,116 98	
	10,340 43	
	1,116,331 92	
Repayments for lands erroneously sold:		
To Green V. Sanders, Arkansas	24 20	
Griffith C. Mock, Arkansas	30 00	
Wm. H. Lightfoot, Arkansas	30 00	
Warren N. Camp, Arkansas	50 00	
Louis M. Howard, Arkansas	6 00	
Joseph D. Simmons, Arkansas	14 00	
Frederick Reeves, Arkansas	150 00	
Wm. Glover, Arkansas	13 00	
Washington R. Green, Arkansas	18 00	
Wm. Hughes, Arkansas	14 00	
Andrew J. Wright, Arkansas	7 00	
Jno. B. Rodgers, Arkansas	7 00	
John T. McCarroll, Arkansas	13 23	
Wm. H. Outhout, Arkansas	7 00	
Green N. Heflin, Arkansas	50 00	
Elijah W. Smiley, Arkansas	5 00	
Wells W. Wilson, Arkansas	50 00	
Anderson J. Allison, Arkansas	18 00	
Geo. W. Brumley, Arkansas	6 00	
John M. Wilson, Arkansas	50 00	
John W. Kirby, Arkansas	13 96	
Hezekiah T. Boyd, Arkansas	100 00	
John C. Ritchie, Arkansas	7 00	
Wm. J. McDonald, Arkansas	7 00	
M. E. Hasty, Arkansas	6 00	
W. S. Oliver, Arkansas	200 00	
Sandy Carter, Arkansas	9 00	
Thomas Padgett, Arkansas	50 00	
John F. Hart, Arkansas	142 33	
Geo. W. Penn, Arkansas	100 00	
Baaham Bullock, Arkansas	30 00	
John G. Hickey, Arkansas	7 00	
Bernard Cremer, Arkansas	100 00	
Thomas Jackson, Arkansas	6 00	
S. Duncan, John K. Duncan, Eliza J. Scott, and Sarah D. Anderson, Arkansas	19 78	
Conrad Elsken and John J. Bowles, Arkansas	50 00	
Alex. Barnes, jr., Arkansas	14 56	
Stuart Morris, Arkansas	30 05	
Charles W. Goodlander, Arkansas	100 00	
Strangeman H. Dunham, Arkansas	14 00	
John A. McCormick, Arkansas	49 63	
Jno. C. McDaniel, Alabama	49 79	
David A. Wright, Alabama	49 93	
Willis Holder, Alabama	13 00	
South and North Alabama Railroad, Alabama	82 00	
James M. Rominie, Alabama	7 00	
Wm. W. T. Wheeler, Alabama	7 00	
Wm. R. Crutcher, Alabama	7 00	
Sarah E. Looser, Alabama	14 00	
Carried forward	1,848 46	

Repayments for lands erroneously sold—Continued.	
Brought forward	$1,848 46
To Eli H. Pilant, Alabama	7 00
Wm. F. Moss, Alabama	17 85
James R. Smith, Alabama	40 13
Atelia Powell, Alabama	6 00
Newton N. Brown, Alabama	14 00
Frances Stringer, Alabama	80 36
Chas. A. Hester, Alabama	7 00
Martin A. Harbison, Alabama	14 20
Edward F. Ross, Alabama	99 70
Mary A. Harwell, Alabama	6 00
Wm. High, Alabama	14 00
Jno. L. Shaw, Alabama	20 28
Geo. C. Howell, Alabama	7 00
James H. Conerly, Alabama	14 00
Henry N. Brown, Alabama	7 00
J. O. King, Alabama	20 05
Jacob B. Smith, Alabama	6 00
Meredith B. Curler, Alabama	19 65
John Jackson, Alabama	19 62
Jno. T. Ingle, Alabama	19 62
Wm. M. Brown, Alabama	14 00
Caswell Kite, Alabama	139 96
Chas. H. Rowland, Arizona	14 00
Thomas Driscoll, Arizona	160 00
Henry B. Gwinn, Arizona	160 00
Frederick Maish, Arizona	160 00
James W. Perry, California	14 50
Horace Whittaker, California	22 00
James A. Ragle, California	16 00
Jno. C. Duel, California	16 00
Marion K. Harris, California	35 00
Alexander Hugueny, California	16 00
Walter Ede, California	100 00
Joseph Wood, California	34 00
Giacoma Badaraco, California	100 00
J. J. Rinehart, California	50 00
Eli Sparkes, California	14 00
Wm. Cotter, California	11 00
Thomas J. Fowler, California	200 00
John Mooney, California	86 62
James Pierce, California	200 00
Harry Rishabarger, Colorado	200 00
A. Parnell, J. Brown, and S. R. Pierce, Colorado	10 00
Thos. Wilkins, Colorado	37 33
Jno. Williamson, Colorado	6 00
Wm. E. Neale, Colorado	12 00
Richard Houle, Colorado	18 26
Anthony Shable, Colorado	6 00
James M. Ricketts, Colorado	3,200 00
Daniel Shea, Colorado	50 58
Eliza Ann Williamson, Colorado	22 00
The Aurora Mining and Milling Company	10 00
John Lath, Colorado	22 00
Faustine Jaramillo, Colorado	3 80
Fred. E. Burchinal, Colorado	9 51
Thomas Balman, Colorado	20 71
Z. Adam Willard, Colorado	40 00
Wm. H. Phillips, Dakota	14 00
Jno. J. Cruden, Dakota	14 00
Joseph H. Brown, Dakota	14 00
Kate A. Hill, Dakota	40 47
Louis E. Brunn, Dakota	14 00
Otto A. Wegner, Dakota	14 00
Edward T. Putnam, Dakota	14 00
Wm. Lebry, Dakota	9 00
Walter W. Wilkins, Dakota	14 00
Harry D. Bullard, Dakota	14 00
John M. Henyan, Dakota	14 00
Franklin J. Berry, Dakota	14 00
Robt. T. McIntire, Dakota	14 00
Robt. J. Gell, Dakota	14 00
Frederick G. Docketader, Dakota	14 00
Will T. Seymour, Dakota	15 31
Philip M. Liddy, Dakota	13 00
Wm. McNally, Dakota	14 00
Carried forward	7,792 97

Repayments for lands erroneously sold—Continued.	
Brought forward	$7,792 97
To Thos. E. Bonfield, Dakota	187 69
Andrew J. Darr, Dakota	14 00
Henry Ogden, Dakota	6 45
Thos. C. Conger, Dakota	14 00
Ambrose L. Robinson, Dakota	14 00
John B. Kline, Dakota	13 98
George P. Perkins, Dakota	14 00
Hiram Agan, Dakota	7 00
Adam George Weimer, Dakota	14 00
Ulrich Thoman, Dakota	14 00
Jacob Mettler, Dakota	4 00
Alden Whitney, Dakota	14 00
Thomas M. Towne, Dakota	14 00
John Keepe, Dakota	14 00
Chas. F. Baumgart, Dakota	14 00
Fritz Stuck, Dakota	14 00
John Shields, Dakota	18 00
Erik E. Outland, Dakota	18 00
Firman C. Couch, Dakota	14 00
Geo. Marshall, Dakota	14 00
John A. Reed, Dakota	13 81
Willie F. Simmons, Dakota	42 13
Christ Schneider, Dakota	39 43
Hiram N. Bishop, Dakota	136 30
Elizabeth Deeg, Dakota	39 95
Etta J. Burroughs, Dakota	14 00
Andrew Picket, Dakota	13 80
Henry J. Sontag, Dakota	14 00
John Horton, Dakota	48 81
Jno. A. Grant, Dakota	14 00
Joseph J. Smith, Dakota	14 00
Claud R. Gosslee, Dakota	14 00
Stephen T. Adams, Dakota	29 68
Isaac B. Henyan, Dakota	14 00
August W. Abraham, Dakota	14 00
Wm. A. Hudson, Dakota	14 00
Sarah A. Ayerst, Dakota	14 00
Peter Perrin, Dakota	14 00
Jonathan Nichols, Dakota	14 00
Henry Oberlin, Dakota	14 00
Fred Jersey, Dakota	14 00
Frank J. Rosenberg, Dakota	14 00
Charles S. Grover, Dakota	15 70
Alvan McGuffey, Dakota	215 00
Wm. C. Warlow, Dakota	6 00
Delos C. Ward, Dakota	14 00
Jno. A. Palmer, Dakota	14 00
Giles E. Menhow, Dakota	13 87
Isaac T. Young, Dakota	14 00
Wm. Bain, Dakota	14 00
Frank T. Bates, Dakota	18 00
Herbert C. Andrews, Dakota	14 00
Joseph A. Colcord, Dakota	14 00
Fred. P. Swetting, Dakota	14 00
Cornelius Regan, Dakota	14 00
Henry Krumweid, Dakota	7 00
Leon Aransohn, Dakota	14 00
Chas. O. Hawley, Dakota	18 00
John W. Gard, Dakota	14 00
Emily B. Ellithrope, Dakota	14 00
Mary Castello, Dakota	14 00
Decatur W. Frisby, Dakota	14 00
Henry Jewell, Dakota	14 00
George H. Smith, Dakota	14 00
Sylvester S. Jarrett, Dakota	15 25
Oliver Austin, Dakota	14 00
John M. Dennett, Dakota	14 00
Patrick Martin, Dakota	14 00
Kasper G. Schmidt, Dakota	39 25
Wm. Vocke, Dakota	51 09
Henry P. Sales, Dakota	87 69
Alexander D. Joslin, Dakota	14 00
Samuel B. Loomis, Dakota	14 00
Albert Snobodney, Dakota	14 00
Cate Ellison, Dakota	14 00
Marcus L. Hoisington, Dakota	14 00
Joseph S. Berry, Dakota	14 00
Adam Findeir, Dakota	14 00
Argo A. Brown, Dakota	14 00
Carried forward	9,640 80

Repayments for lands erroneously sold—Continued.			
Brought forward		$9,640	80
To Thomas L. Humes, Dakota		14	00
George A. Woods, Dakota		13	00
Abraham Linnander, Dakota		5	68
John F. Rouayne, Dakota		14	00
Jno. W. Bailey, Dakota		14	00
John C. Douglass, Dakota		15	74
John H. Frazer, Dakota		14	00
Richard D. Thornton, Dakota		14	00
Jacob Bornholdt, Dakota		14	00
Milton A. Race, Dakota		14	00
Wm. A. Epling, Dakota		14	00
J. Parker Liddle, Dakota		14	00
Wm. McIntyre, Dakota		39	00
Stephen Flesher, Dakota		14	00
Geo. W. Forbes, Dakota		14	00
Jno. Haverly, Dakota		13	85
Randall & Buckmaster, Dakota		14	00
Martin Sullivan, Dakota		14	00
Andrew J. Brown, Dakota		14	00
Melvin B. Dille, Dakota		14	00
Joseph Kilburn, Dakota		14	00
Duncan McLean, Dakota		14	00
Michael Reisdorfer, Dakota		185	92
Patrick Forney, Dakota		14	00
Moses S. Titus, Dakota		14	00
Henry P. Wilber, Dakota		14	00
Solomon S. Gayford, Dakota		14	00
Arthur Smart, Dakota		14	00
Enoch Vernon, Dakota		14	00
Geo. H. Stevens, Dakota		17	20
Benj. P. M. Hill, Dakota		14	00
Nathaniel J. Brown, Dakota		200	70
Otto P. Everhard, Dakota		14	00
Henryk Raffelson, Dakota		14	00
John D. Hayes, Dakota		13	90
Gustav Kristiansen, Dakota		14	00
Geo. Walters, sr., Dakota		14	00
Jno. G. Copley, Dakota		14	00
Lee A. Goldsburgh, Dakota		25	17
Wm. H. Egan, Dakota		14	00
Ira F. Randolph, Dakota		14	00
Jno. H. L. Williams, Dakota		21	75
Susan Rodo Carter, Dakota		14	00
Jonas Hawkins, Dakota		14	00
Albert J. Morgan, Dakota		14	00
Wm. T. Miller, Dakota		14	00
Maranda Carrier, Dakota		14	00
Wm. Osmotherly, Dakota		14	00
Albert Bade, Dakota		14	00
Joseph J. Dodge, Dakota		13	97
Wm. C. Thomas, Dakota		15	61
Russell Aylen, Dakota		14	00
Edwin L. Rugg, Dakota		14	00
Wm. Porter, Dakota		14	00
Chas. O'Hara, Dakota		16	00
Oluf C. Berg, Dakota		14	00
John Wetz, Dakota		14	00
Frederick Jenner, Dakota		18	00
Geo. Onstott, Dakota		14	00
Chas. H. Burke, Dakota		18	80
Albert Rogers, Dakota		14	00
Jno. J. Walker, Dakota		18	00
Jno. F. Carlblon, Dakota		14	00
Sanford P. Brokaw, Dakota		14	00
Julius W. Fuller, Dakota		14	00
W. Scott Vande Bogart, Dakota		18	00
Stephen T. Adams, Dakota		14	00
Chas. T. Babcock, Dakota		14	00
Jno. A. Wiley, Dakota		14	00
Samuel R. Breese, Dakota		14	00
Joseph W. Burke, Dakota		14	00
Wm. J. Doyle, Dakota		14	00
Jennie Healy, Dakota		14	00
Joel Aldrich, Dakota		14	00
Olof G. Grundsten, Dakota		14	00
Samuel Swenson, Dakota		15	55
Ewing Cushing, Dakota		28	00
James E. Ryan, Dakota		14	00
Carried forward		11,166	64

Repayments for lands erroneously sold—Continued.			
Brought forward		$11,166	64
To Wm. W. Kyle, Dakota		192	29
Lauren Dunlap, Dakota		186	91
Wm. A. Turner, Dakota		17	22
Bernard Boellger, Dakota		14	00
Emma M. Miller, Dakota		188	43
James S. Price, Dakota		14	00
Thos. G. Scott, Dakota		14	00
Samuel Stoner, Dakota		14	00
Misael B. Lewis, Dakota		188	88
Jas. M. Boine, Dakota		185	80
Jacob Mettler, Dakota		50	00
Chas. E. Lynch, Dakota		14	00
Hiram Knapp, Dakota		14	00
Elmore F. Lewis, Dakota		188	88
Chas. A. Errickson, Dakota		18	01
Edwin L. Tiffany, Dakota		14	00
Alphonso Munger, Dakota		16	85
David Higbee, Dakota		2	00
Sarah A. Mitchell, Dakota		14	00
Chippewa Lumber and Boom Company, Dakota		50	00
Austin C. Marshman, Dakota		14	00
Owen Thornton, Dakota		18	00
Anton Guiers, Dakota		18	00
Hugh B. Smith, Dakota		14	00
Edward Conklin, Dakota		14	00
Joseph F. Smith, Dakota		13	48
Wm. T. Sheppard, Dakota		14	00
Wm. J. Smith, Dakota		14	00
Susan Smith, Dakota		14	00
Geo. F. Radelford, Dakota		19	56
Frederick Green, Dakota		14	00
Jacob W. Burner, Dakota		14	00
Joseph P. Stilwell, Dakota		14	00
Gideon Jones, Florida		13	00
Freeman S. Jones, Florida		13	62
Augustus O'McDonnell, Florida		14	00
Joseph J. Williams, Florida		14	00
Jno. P. Madison, Florida		7	00
Timothy Vich, Florida		13	00
Solomon Thompson, Florida		8	75
Jonathan M. Jones, Florida		14	00
Thomas Blount, Florida		2	00
A. G. Erwin, Florida		21	77
Jessie J. Marlow, Florida		14	00
A. L. Frazier, Florida		14	00
David Branch, Florida		14	00
Thos. J. Kelly, Florida		14	00
Adam Buck, Florida		6	90
Elijah W. Padgett, Florida		13	00
E. L. Avery, Florida		19	08
Jas. G. Merrill, Iowa		50	00
Nicholas Vedder, Iowa		14	00
John Channon, Iowa		50	00
E. E. Shattuck, Iowa		100	00
James C. Bernard, Idaho		50	00
Sarah Coffin, Idaho		127	80
Mrs. Elizabeth Crawford, Idaho		50	00
Peter B. Lewis, Idaho		9	00
Geo. W. Hall, Kansas		14	00
Mary E. Bryan, Kansas		100	00
Rufus E. Baldwin, Kansas		9	00
Jacob Rymerson, Kansas		14	00
C. J. Applerot, Kansas		18	00
Robert Hughes, Kansas		18	00
Horace W. Brody, Kansas		14	00
Michael Finn, Kansas		9	00
Gideon G. Smith, Kansas		14	00
W. B. Mead, Kansas		14	00
Geo. F. M. Fall, Kansas		47	12
Eléza McIntire, Kansas		150	00
Isham B. Ferguson, Kansas		14	00
N. W. Pierson, Kansas		7	00
Magnus Servin, Kansas		6	84
Russell T. Kerr, Kansas		18	00
Joseph McMahon, Kansas		14	00
A. H. Adcock, Kansas		14	00
R. H. Trusdale, Kansas		14	00
Carried forward		13,934	83

Repayments for lands erroneously sold—Continued.	
Brought forward	$13,934 83
To John Justis, Kansas	200 00
Abram D. Gortschus, Kansas.	18 00
Martha J. Boon, Kansas	169 54
Jno. L. Govow, Kansas	9 00
Joseph Seaman, Kansas	13 98
David W. Stouder, Kansas	14 00
Eli Franks, Kansas	14 00
James M. Butler, Kansas	14 00
Thomas Moger, Kansas	14 00
Wm. Thompson, Kansas	200 00
Carie L. Wheelock, Kansas	14 00
James W. Ewing, Kansas	11 00
Robt. White, Kansas	18 00
F. M. Sims, Kansas	14 00
Frederic Matteson, Kansas	14 00
T. B. Goldsby and F. M. Bradley, Louisiana	103 10
Wm. E. Davis, Louisiana	37 85
Clabon Stroud, Louisiana	50 00
Wm. Cook & Co., Louisiana	80 38
Wm. A. Holton, Louisiana	103 49
Jno. M. Liles, Louisiana	100 67
Jno. A. Kelley, Louisiana	101 21
W. M. Rice, Louisiana	103 04
Wm. F. Boon, Louisiana	99 68
Jno. McDonough, Louisiana	144 45
Wm. C. Haley and F. M. Coe, Louisiana	140 00
Jno. C. Loye, Louisiana	698 79
Henry Lamport, Louisiana	50 00
Hicks L. Young, Louisiana	184 77
Richard F. Hardaway, Louisiana	49 94
Decleede and Adverline Dupuy, Louisiana	225 00
Theodore W. Gallaspie, Louisiana	12 00
Aloys G. M. Schmidt, Louisiana	8 35
Thomas B. Neal, Louisiana	10 90
Chas. H. Patton, Louisiana	38 40
Geo. P. McMichael, Louisiana	200 00
D. B. Daniels, Louisiana	50 36
J. P. and M. Lafrance, Louisiana	214 97
Jno. L. Woods, Louisiana	101 00
G. Johnson and M. A. Boyes, Louisiana	200 13
Henry and Bertrand Beer, Louisiana	50 31
Henry C. Delancey, Mississippi	9 00
Wm. T. Evans, Mississippi	199 58
Jno. A. Minniece, Mississippi.	29 32
Mary Fuller, Mississippi	366 27
Norman A. Endersbe, Minnesota	9 00
Henry Drever, Minnesota	14 00
Mathias Waggoner, Minnesota	50 00
John Yunker, Minnesota	11 74
W. H. Clapp, Minnesota	14 00
John Ross, Minnesota	17 16
S. Allen Day, Minnesota	14 00
Chas. F. Kindred, Minnesota.	100 00
Jno. Martin, Minnesota	49 62
Thornton Nelson, Minnesota.	30 68
Chas. A. Hanlon, Minnesota	15 31
Chas. B. Lamburn, Minnesota.	51 00
Geo. M. Love, Minnesota	14 00
John P. Webber, Minnesota	50 00
Wm. Carey, Minnesota.	13 00
J. E. Hayward, Minnesota	50 00
Albert B. Shepard, Minnesota	18 00
Samuel O. Masters, Minnesota	9 00
Frederick Frankhouse, Minnesota	17 65
Geo. Leither, Minnesota	33 79
Carried forward	19,017 16

Repayments for lands erroneously sold—Continued.	
Brought forward	$19,017 16
To Napoleon Russell, Minnesota	50 00
Chas. Baumann, Minnesota	13 44
Sumner W. Farnham and Jas. A. Lovejoy, Minnesota	91 12
Anders P. Nelson, Minnesota.	6 81
Peter P. Krogseng, Minnesota	14 00
M. Q. Caldwell, Minnesota	47 23
Elias Johnson, Minnesota	14 00
Chas. W. Andrews, Minnesota	13 00
Wm. Peterson, Minnesota	16 00
James McArton, Minnesota	14 00
Niles Poulson, Minnesota	9 00
Robt. Coates, Minnesota	37 81
Embret C. Hawkins, Minnesota	14 00
John McKinley, Minnesota.	50 00
Svend S. Sletto, Minnesota	14 00
Andrew L. Anderson, Minnesota	18 00
Willis Hoyt, Minnesota	18 00
Erick Emil Erickson, Minnesota	14 00
Alex. Young, Minnesota	14 94
Louis Hunt, Minnesota.	14 00
C. A. Pillsbury, Minnesota	8 00
Oliver W. Eckel, Minnesota	14 00
John D. Matherson, Montana	22 00
Henry B. McDonald, Montana	10 52
James H. Nixon, Montana	22 00
Geo. Thexton, sr., Montana	189 00
Owen Matthews, Montana	20 00
John B. Richard, Montana	50 00
Geo. P. Harwood, Montana	23 37
Chas. E. Comstock, Montana.	16 00
Wm. A. Afflach, Montana	22 00
Jno. R. Dean, Montana	40 00
Leonard Stone, Montana	14 00
Peter W. Cudney, Montana	22 00
Jno. J. Fraser, Montana	22 00
Thos. Loughridge, Montana	100 00
Jesse A. Wood, Missouri	50 00
Wm. M. Thompson, Missouri.	30 00
John M. London, Missouri	100 00
A. M. Dodson, Missouri	14 54
Joel M. Campbell, Missouri	15 65
Wm. Cole, Missouri	3 30
John B. Hill, Missouri	50 00
Esmer M. Baker, Missouri	12 00
Robt. N. Wallace, Missouri	100 00
John O. Lee, Missouri	14 00
Jno. W. Payton, Missouri	100 00
Edmund A. Jessup, Missouri.	14 00
Thos. J. Whitlock, Missouri	50 00
Franklin Salmon, Missouri	13 87
Peter Rentsch, Missouri	14 77
Geo. H. Nettleton, Missouri	50 00
T. B. Haskins, Missouri	16 00
Jacob Atteholz, Missouri	50 05
Jarvis S. Rogers, Missouri	50 00
Thos. A. Bell, Missouri	16 85
Elias S. Estes, Missouri	100 00
Thos. Whalen, Michigan	18 00
Ambrose L. Burr, Michigan	6 00
C. B. Freyburg, Michigan	125 63
Wm. Q. Atwood, Michigan	46 20
M. Choate Tuttle, Michigan	50 00
Chas. L. Speck, Michigan	13 07
Chas. H. Chick, Michigan	50 00
Delos A. Blodgett, Michigan.	57 03
Robt. Walbridge, Michigan	10 00
Wm. E. Dodge, deceased, Michigan	100 00
Dominic Doyle, Michigan	50 00
Henry Keisling, Michigan	44 62
Monroe Kloch, Michigan	50 00
Lorenzo Balles, New Mexico.	5 00
Frank Shrenger, New Mexico	1,380 00
Miguel A. Ottro, New Mexico	1,600 00
Carried forward	24,566 08

Repayments for lands erroneously sold—Continued.	
Brought forward	$24,566 08
To Fernando Quintana, New Mexico	5 00
Wm. H. Colbern, New Mexico	150 00
Merced Carabajol, New Mexico	16 00
Andrew J. D. Leary, Nebraska	14 00
James T. Browder, Nebraska	14 00
John P. Modee, Nebraska	18 00
Grace Provost, Nebraska	50 00
Joseph Wall, Nebraska	14 00
Abraham Rosenberg, Nebraska	14 00
John Cole, Nebraska	9 00
Henry Wenholz, Nebraska	200 00
Henry E. Sheau, Nebraska	9 00
Silas A. Holcomb, Nebraska	33 76
Adam Simpson, Nebraska	24 40
Henry G. Litchfield, Nebraska	14 00
Joseph Ogarzolka, Nebraska	9 00
Jesse L. Hight, Nebraska	14 00
Thomas J. H. Dalbey, Nebraska	13 54
Chas. W. Hopkins, Nebraska	14 00
Samuel L. Cannon, Nebraska	18 00
Alexander S. Murheid, Nebraska	14 00
James L. Matthew, Nebraska	14 00
Chas. N. Leavey, Nebraska	21 75
Chas. Mulhern, Nebraska	14 00
David Williams, Oregon	12 66
Mrs. Susan Tyson, Oregon	14 00
Geo. F. Billings, Oregon	40 87
Wm. W. Walker, Oregon	12 99
L. M. Smith, Utah	14 00
Louis Wurzburger, Utah	112 21
Chas. Mahrt, Utah	156 50
Mike Goldsticker, Utah	149 64
Alexander Smith, Utah	159 36
James Brown, Utah	160 00
Gabriel Huntsman, Utah	36 77
Wm. N. Cook, Utah	6 85
Caleb Luker, Utah	8 00
Hans O. Forenson, Utah	16 00
Peter J. Berres, Wisconsin	6 00
David A. Woodruff, Wisconsin	6 00
Wm. A. Fowler, Wisconsin	250 00
Lawrence Morrissey, Wisconsin	14 00
Gustavus Stevens and Geo. F. Ash, Wisconsin	251 00
Wm. F. Vilas, Wisconsin	56 75
Geo. W. Helvey, Wisconsin	50 00
Geo. Silverthorn, Wisconsin	100 00
Henry Skerry, Wisconsin	50 00
Sylvester M. Scott, Wisconsin	50 00
Hans Thoroldson, Wisconsin	50 00
Isaac Staples, Wisconsin	100 00
Peter Schmit and Henry Schmit, Wisconsin	47 20
Chas. L. Colby, Wisconsin	300 00
Thos. B. Scott and John Phelps, Wisconsin	40 06
Womg Jersey, Wisconsin	14 00
Chas. Turner, Wisconsin	50 00
W. H. Laird, Jas. L. and M. G. Norton, Wisconsin	200 00
Geo. and John Hyland, Wisconsin	400 47
C. W. Wells and L. Tillotson and I. Barrows, Wisconsin	702 95
Augustus W. Lawrence, Wisconsin	102 19
Frederick Kern, Wisconsin	14 00
Edgar W. Culver and Thos. McDermott, Wisconsin	50 00
Theodore B. Wilcox, Wisconsin	100 00
Chas. M. Paine, Wisconsin	47 96
Carried forward	29,235 96

Repayments for lands erroneously sold—Continued.	
Brought forward	$29,235 96
To Hiram Goddard, Wisconsin	50 00
Jens. Yorkison, Wisconsin	9 00
Daniel Shaw, Wisconsin	50 00
Ezra D. Davison, Washington Territory	100 00
Frederick H. Kinsey, Washington Territory	200 00
Albert C. Woodward, Washington Territory	200 00
Joseph L. Payne, Washington Territory	12 44
James D. White, Washington Territory	200 00
Willis A. M. Teel, Washington Territory	200 00
Wm. A. Wright, Washington Territory	200 00
Van A. Dayman, Washington Territory	8 72
John Goodwin, Washington Territory	200 00
Wm. Wood, Washington Territory	194 02
Wm. Lemon, Washington Territory	100 00
Chas. E. Oaks, Washington Territory	200 00
Andrew Johnson, Washington Territory	22 00
Augustus T. Printler, Washington Territory	198 25
Chas. A. Parrot, Washington Territory	3 00
R. Moulton, Washington Territory	90 00
Clarence L. Whiting, Washington Territory	16 00
Martin Harter, Washington Territory	200 00
Chas. Boehrig, Washington Territory	14 00
Frank C. Wimbles, Washington Territory	14 00
Lorenzo Hammer, Washington Territory	200 00
Francis M. Dougherty, Washington Territory	132 25
Jesse Cyrus, Washington Territory	200 00
Frisby B. Logan, Washington Territory	100 00
Edward Wright, Washington Territory	200 00
Seneca Phillis, Washington Territory	100 00
C. C. Perry, Washington Territory	50 00
	32,699 64
Salaries and commissions of registers and receivers, 1884:	
To E. M. Brown	643 64
C. A. Brastow	171 44
Jno. C. Davis	533 42
A. U. Eaton	18 00
	1,366 50
Salaries and commissions of registers and receivers, 1881 and prior years:	
By J. V. Bogert	$44 96
Chas. A. Brastow	265 56
Richard Joseph	452 29
John Lind	504 11
Geo. W. Watson	25 59
	1,292 51

Salaries and commissions of registers and receivers, 1882:		
To Chas. A. Brastow	$469 94	
J. V. Bogert	245 31	
Wm. M. Burwell	50 00	
Vincent W. Bayless	284 78	
Daniel Chaplin	60 66	
John C. Davis	91 67	
A. W. Eaton	6 80	
J. M. Farland	201 24	
H. S. Lovejoy	975 00	
H. A. Pease	300 00	
A. C. Phillips	16 32	
Davis Wilson	233 99	
		2,935 71
Deduct repayments:		
By J. M. Adams	$237 90	
E. M. Brown	44 49	
Geo. B. Curry	116 56	
Joel F. Nason	2 40	
W. H. Somers	118 79	
C. N. Thornbury	1 50	
John S. Wilson	8 29	
		529 93
		2,405 78
Salaries and commissions of registers and receivers, 1883:		
To J. M. Adams		708 64
C. N. Baird		452 29
Wm. M. Burwell		247 25
Henry Booth		6 72
A. W. De Long		757 90
A. W. Eaton		87 30
John M. Farland		188 50
C. H. Gould		2,452 91
W. M. Garvey		300 00
John Lind		407 68
A. O. Marsh		1,310 44
W. H. C. Mitchell		691 34
Richard J. Monroe		1,665 94
F. H. Merrill		382 54
H. C. Olney		83 90
J. Q. Peyton		537 10
T. H. Rooney		1,170 33
Geo. Ritchey		103 30
Vac Randa		1,038 46
Paul J. Strobach		123 63
C. B. Tyler		722 00
Geo. W. Watson		531 70
H. M. Waters		227 94
		14,197 81
Deduct repayments:		
By V. W. Bayless	$312 76	
Chas. A. Braston	18 22	
Geo. B. Brooks	145 70	
Edwin S. Crocker	58 29	
C. E. Chandler	51 65	
E. B. Chaplin	128 18	
Geo. H. Crumb	156 96	
H. Carpenter	37 93	
C. E. Dailey	626 56	
J. L. Dyer	52 80	
James Dumars	48	
A. W. De Long	384 86	
Wm. H. Francis	8 15	
H. H. Griffith	400 37	
C. H. Gould	104 04	
W. B. Herriott	1,150 48	
W. S. Hickox	331 26	
James H. Jones	268 25	
Jerome Knox	121 70	
C. E. Kelsey	275 20	
Tipton Lindsey	167 18	
Joel F. Mason	39 50	
P. H. McNulty	238 62	
H. Z. Osborne	352 54	
Chas. D. Peck	796 70	
H. D. Root	308 40	
C. H. Smith	139 90	
Carried forward	6,676 68	14,197 81

Salaries and commissions of registers and receivers, 1883—Cont'd.		
Deduct repayments:		
Brought forward	$6,676 68	$14,197 81
By W. H. Somers	87 00	
E. B. Sanders	40 87	
A. A. Tufts	211 75	
John Ulrick	30 08	
L. G. Wilcox	28 60	
J. L. Wise	409 41	
		7,484 39
		6,713 42
Salaries and commissions of registers and receivers, 1884:		
To J. M. Adams		4,985 45
W. J. Anderson		5,700 00
Jno. H. Allen		5,700 00
Wm. Anyan		5,700 00
C. F. Babcock		5,700 00
W. H. Bailhache		5,700 00
V. W. Bayless		3,039 38
H. Barber, jr		5,700 00
Henry Booth		5,674 54
E. Ballou		4,500 00
M. M. Bane		5,700 00
D. O. Beatty		1,500 00
Currie G. Bell		2,989 77
C. A. Brastow		3,528 26
Geo. G. Brooks		1,430 80
James Braden		4,094 04
A. D. Buckworth		750 00
Z. T. Burton		949 45
H. S. Cunningham		5,700 00
H. Carpenter		1,870 47
Solomon Cooper		5,700 00
Geo. B. Currey		5,700 00
J. T. Carlin		3,988 66
C. E. Chandler		3,968 57
C. H. Chamberlain		5,700 00
J. G. Chandler		5,700 00
Geo. H. Crumb		4,511 79
E. P. Champlin		5,064 62
Edwin S. Crocker		2,380 90
Geo. B. Crooks		255 06
Adolph Dobrowsky		5,700 00
James Dumars		5,700 00
J. L. Dyer		3,861 80
C. E. Dailey		2,940 17
A. W. De Long		2,068 12
A. W. Eaton		4,216 08
M. H. Fitch		6,276 96
J. C. Fullerton		5,700 00
Geo. B. Folsom		1,991 35
W. H. Francis		5,700 00
C. H. Gould		2,259 23
H. H. Griffiths		1,801 35
Chas. F. Gardner		4,542 40
E. C. Geary		5,700 00
Wm. B. Herriott		3,786 22
R. R. Hays		5,700 00
J. W. Haverstick		5,700 00
W. S. Hickox		4,575 71
E. W. Henderson		5,700 00
B. E. Hutchinson		5,422 81
J. T. Hull		5,700 00
W. S. Hurlbut		5,349 50
A. J. Hoisington		3,770 60
E. J. Jenkins		4,157 02
J. H. Jones		2,374 70
Malachi Krebs		4,057 42
Jerome Knox		3,483 97
C. E. Kelsey		5,258 67
Tipton Lindsey		5,700 00
A. E. Lemee		2,850 00
W. B. Lambert		5,700 00
Robt. Lowry		5,700 00
Fred. J. Leonard		4,597 04
John Lind		3,263 59
P. H. McNulty		2,783 04
M. Marks		5,700 00
W. B. Mitchell		5,700 00
Carried forward		289,369 57

Salaries and commissions of registers and receivers, 1884—Cont'd.		
Brought forward		$289,369 51
To J. F. Mason		700 00
A. O. Marsh		5,700 00
R. W. Montgomery		5,700 00
W. H. C. Mitchell		1,970 68
Richard J. Monroe		4,292 60
Joel F. Nason		1,446 58
H. Z. Osborne		1,522 59
W. H. Pilkenton		5,700 00
A. C. Phillips		5,700 00
Otis Perrin		5,700 00
J. G. Pilsbury		5,700 00
C. D. Peck		2,788 67
Sanford Parker		5,700 00
J. Q. A. Peyton		2,428 94
H. R. Pease		3,450 00
John F. Rollins		6,200 00
T. H. Rooney		1,500 00
H. D. Root		2,429 42
W. W. Spalding		4,500 00
T. J. Sherwood		5,700 00
H. C. Sletten		5,700 00
H. W. Stone		5,700 00
R. G. Stuart		5,700 00
C. H. Smith		3,071 19
E. B. Sanders		5,700 00
Samuel W. Sherfey		5,700 00
W. H. Somers		5,596 04
E. S. Salisbury		5,700 00
Arthur J. Shaw		1,385 20
E. G. Swanstrom		1,200 00
John Taffe		4,500 00
A. A. Tufts		3,599 98
J. Wesley Tucker		5,683 52
C. N. Thornburg		5,700 00
Wm. H. Tancre		5,700 00
John Ulrich		2,499 29
Zenas L. Wise		4,507 12
W. C. Willits		5,700 00
S. C. Wright		1,440 00
Isaac H. Wing		1,500 00
H. A. Wilson		5,700 00
J. L. Wilson		5,700 00
J. S. Waters		4,116 92
F. G. Ward		2,992 40
H. M. Waters		4,276 72
J. M. Wilkinson		5,700 00
A. O. Whipple		5,194 60
L. G. Willcox		1,300 00
Thos. Wrong		1,586 87
		491,048 64
Deduct repayments:		
By H. O. Beatty	$342 70	
M. H. Fitch	576 96	
E. J. Jenkins	770 00	
Richard J. Monroe	751 78	
J. F. Rollins	500 00	
John Taffe	1,500 00	
I. H. Wing	851 46	
		5,292 90
		485,755 74
Expenses of depositing public moneys, 1882:		
To James Stout		1 90
Deduct from repayment:		
By E. W. Henderson		20 00
Excess of repayment		18 10
Expenses of depositing public moneys, 1883:		
To Adams Express Co		2,354 79
Wm. Auyan		11 65
Geo. B. Currey		8 85
A. U. Eaton		20 75
A. O. Marsh		20 00
Richard J. Monroe		133 00
C. D. Peck		23 00
Carried forward		2,572 04

Expenses of depositing public moneys, 1883—Continued.		
Brought forward		$2,572 04
To T. H. Rooney		89 50
T. J. Sherwood		15 00
Robt. G. Stuart		144 75
		2,821 29
Deduct repayments:		
By Jno. H. Allen	$10 00	
J. M. Adams	34 25	
Henry Booth	26 18	
C. F. Babcock	12 50	
Edwin S. Crocker	44 45	
Solomon Cooper	71 90	
C. E. Chandler	37 20	
Geo. B. Folsom	4 20	
W. M. Garvey	9 20	
W. B. Herriott	5 55	
J. W. Haverstick	21 65	
E. W. Henderson	40	
Lewis Hanback	7 15	
Willard S. Hickox	6 80	
James H. Jones	3 00	
Jerome Knox	50 81	
Malachi Krebs	23 26	
Tipton Lindsey	8 25	
Wm. B. Lambert	7 95	
Fred. J. Leonard	24 60	
A. E. Lemee	5 45	
Joel F. Mason	55	
R. W. Montgomery	1 91	
A. O. Marsh	2 60	
Otis Perrin	6 05	
A. C. Phillips	6 15	
W. H. Pilkenton	2 30	
Sanford Parker	22 55	
Vac Randa	26 00	
Samuel W. Sherfey	25 00	
W. H. Somers	18 45	
Thos. J. Sherwood	4 05	
Robt. G. Stuart	43 90	
Jno. Taffe	7 55	
Z. L. Wise	22 00	
		603 21
		2,218 08
Expenses of depositing public moneys, 1884:		
To J. M. Adams		79 00
Adams Express Co		2,784 22
C. F. Babcock		10 00
Currie G. Bell		50 00
James Braden		265 00
Chas. A. Brastow		60 00
Hiram Barber, jr		136 53
H. S. Cunningham		40 00
Edwin S. Crocker		25 00
Solomon Cooper		873 00
H. Carpenter		40 00
Geo. B. Currey		744 70
J. T. Carlin		26 75
C. E. Chandler		139 40
E. P. Champlin		225 98
E. P. Chandler		56 60
Adolph Dobrosky		226 85
A. W. Eaton		78 90
J. C. Fullerton		145 70
Geo. B. Folsom		30 70
W. H. Francis		197 60
C. H. Gould		555 85
Chas. F. Gardner		68 00
Wm. B. Herriott		10 85
Willard S. Hickox		44 00
E. W. Henderson		125 00
R. R. Hays		10 00
A. J. Hoisington		364 47
E. J. Jenkins		12 65
J. H. Jones		4 65
Malachi Krebs		305 40
Jerome Knox		248 38
James Knox		20 00
Carried forward		8,005 18

Expenses of depositing public moneys, 1884—Continued.

Brought forward		$8,005 18
To Tipton Lindsey		90 00
A. E. Lemee		214 10
Fred. J. Leonard		150 00
A. O. Marsh		74 00
Richard J. Monroe		112 67
W. B. Mitchell		83 25
Joel F. Nason		5 50
H. Z. Osborne		68 95
W. H. Pilkenton		42 70
A. C. Phillips		215 75
Otis Perrin		124 90
J. G. Pilsbury		32 00
C. D. Peck		253 52
Sanford Parker		294 00
T. H. Rooney		90 00
T. J. Sherwood		148 40
R. S. Stuart		869 15
Edw. L. Salisbury		141 00
Arthur J. Shaw		60 00
John Taffe		30 00
A. A. Tufts		123 00
J. Wesley Tucker		10 00
C. N. Thornburg		135 70
John Ulrich		6 00
Zenas L. Wise		51 25
S. C. Wright		45 00
Isaac H. Wing		50 00
J. L. Wilson		334 00
J. S. Waters		25 00
F. G. Ward		117 10
Thos. Wrong		3 00
		12,005 12
Deduct repayments:		
By Richard J. Monroe	$8 20	
Thos. H. Rooney	38 16	
John Taffe	11 15	
I. H. Wing	50 00	
		107 51
		11,897 61

Contingent expenses of land offices, 1881 and prior years:

By W. H. Somers	$100 00	

Contingent expenses of land offices, 1883:

To Atchison, Topeka and Santa Fé R. R		93 05
Baltimore and Ohio R. R		72 25
Samuel Burns		10 00
C. N. Baird		102 00
P. Boyle & Co		300 00
Henry Booth		181 67
Central Pacific R. R		46 00
H. S. Cunningham		36 00
Jno. S. Canfield		13 25
Geo. B. Currey		75 00
E. P. Champlin		25 00
Chicago and Northwestern Rwy		3 26
Chicago, Saint Louis and New Orleans R. R		1 24
Chicago, Saint Paul, Minneapolis and Omaha Rwy		1 02
Central Branch Union Pacific R. R		64
John T. Carlin		258 56
Jno. L. Dyer		44 09
A. W. De Lon		75 00
A. W. Eaton		45 25
D. W. Earl		4 39
W. M. Garvey		7 50
R. R. Hayes		375 00
B. E. Hutchinson		60 25
Lewis Hanback		202 50
Kansas Pacific Rwy		82 03
Malachi Krebs		78 05
Jerome Knox		50 00
Carried forward		2,245 00

Contingent expenses of land offices, 1883—Continued.

Brought forward		$2,245 00
To F. J. Leonard		36 85
John Lind		53 00
A. O. Marsh		60 00
Wm. R. Marshall		300 00
Missouri Pacific Rwy		24 18
W. H. C. Mitchell		25 00
Richard J. Monroe		36 00
James Morris		54 40
Northern Pacific R. R		5 74
Pennsylvania R. R		125 00
J. Q. A. Peyton		194 00
T. H. Rooney		300 00
River Press Publishing Co		15 00
E. B. Sanders		379 20
Saint Louis and San Francisco Rwy		85
Sioux City and Pacific R. R		49
J. Wesley Tucker		62 00
The Log Cabin, New Orleans, La		18 00
Union Pacific R. R		60 58
H. M. Waters		396 41
George W. Watson		8 97
A. O. Whipple		23 25
Wood River (Idaho) Times		67 50
		4,491 42
Deduct repayments:		
By William Anyan	$296 00	
H. O. Beatty	8 00	
Hiram Barber, jr	152 50	
Wm. K. Burchinell	167 15	
C. H. Chamberlain	41 75	
J. G. Chandler	25 00	
George H. Crumb	20 40	
George W. Evans	156 57	
E. W. Henderson	2 25	
J. W. Haverstick	14 20	
B. E. Hutchinson	7 50	
R. Joseph	421 74	
Robert Lowry	104 00	
Wm. B. Lambert	1 10	
R. W. Montgomery	3 00	
Vac Randa	10 10	
Samuel W. Sherfey	5 66	
J. Wesley Tucker	50 00	
John Taffe	20 40	
I. H. Wing	100 00	
H. M. Waters	178 40	
		1,785 72
		2,705 70

Contingent expenses of land offices, 1884:

To J. M. Adams	300 00
W. J. Anderson	4,830 00
John H. Allen	900 00
William Anyan	1,925 00
Atchison, Topeka and Santa Fé R. R	9 12
C. F. Babcock	226 00
W. H. Balhache	984 00
H. Barber, jr	5,475 00
Henry Booth	1,732 67
E. Ballow	1,466 45
M. M. Bane	2,307 50
H. O. Beatty	300 00
C. A. Brastow	325 00
George B. Brooks	475 00
Currie G. Bell	150 00
James Braden	1,655 00
Baltimore and Ohio R. R	70 50
Z. T. Burton	1,150 00
H. S. Cunningham	1,893 00
H. Carpenter	720 00
Edwin S. Crocker	200 00
Solomon Cooper	452 00
George B. Currey	1,220 00
J T. Carlin	685 35
Carried forward	29,451 52

Contingent expenses of land offices, 1884—Continued.	
Brought forward	$29,451 59
To C. H. Chamberlain	2,400 00
J. G. Chandler	1,800 00
George H. Crumb	256 67
E. P. Champlin	965 00
Chicago, Rock Island and Pacific Rwy	11 68
C. E. Chandler	315 00
Carson and Colorado R. R	1 09
Chicago and Northwestern R. R	5 76
Central Pacific R. R	44 40
Central Branch Union Pacific R. R	75
James Damars	478 65
J. L. Dyer	263 50
C. E. Dailey	765 00
A. W. DeLong	225 00
Adolph Dobrowsky	40 00
Nathan Delbanco	4 10
Charles W. Drown, secretary	1 00
Denver and Rio Grande Rwy	12 77
George W. Evans	700 00
A. W. Eaton	256 00
D. W. Earl	2 00
M. H. Fitch	2,428 07
J. C. Fullerton	945 50
W. H. Francis	2,530 85
George B. Folsom	198 00
Newman Fisher	25 29
Flint and Pere Marquette R. R	74
Samuel Goozee	156 62
C. H. Gold	804 50
Charles F. Gardner	974 54
E. C. Geary	4,236 75
R. R. Hays	2,750 00
E. W. Henderson	1,500 00
J. T. Hull	3,703 00
Walter S. Hurlbut	510 00
William B. Herriott	330 75
A. J. Hoisington	1,296 63
Willard S. Hickox	1,562 60
B. E. Hutchinson	3,150 00
J. W. Haverstick	450 00
Steamer Humboldt	1 50
E. J. Jenkins	537 00
J. H. Jones	195 00
E. R. Jenkins	225 00
C. E. Kelsey	1,368 20
Jerome Knox	167 75
Malachi Krebs	1,452 00
Kansas Pacific R. R	2 82
A. E. Lemee	533 65
W. B. Lambert	1,126 10
Robert Lowry	7,444 38
Fred. J. Leonard	2,207 50
John Lind	216 00
Lake Shore and Michigan Southern Rwy	45
Louisville and Nashville R R	3 30
Lake Michigan and Lake Superior Transportation	30
Tipton Lindsey	80 00
P. H. McNulty	250 00
M. Marks	3,000 00
W. B. Mitchell	2,133 00
Missouri Pacific Railway	17 98
Richard J. Monroe	3 00
R. W. Montgomery	1,303 53
W. H. C. Mitchell	78 60
A. O. Marsh	260 00
Northern Pacific R. R	13 79
Joel F. Nason	98 00
Oregon Railway and Navigation	7 51
Ohio and Mississippi R. R	4 25
H. Z. Osborne	392 97
W. H. Pilkenton	1,607 00
A. C. Phillips	1,232 80
J. G. Pilsbury	900 00
Pacific Coast Steamship	1 00
Carried forward	92,418 18

Contingent expenses of land offices; 1884—Continued.		
Brought forward		$92,418 18
To C. D. Peck		422 35
Sanford Parker		2,010 00
J. Q. A. Peyton		418 83
Otis Perrin		486 00
H. R. Pease		4,159 37
Pennsylvania R. R		2 08
Jno. F. Rollins		6,077 34
T. H. Rooney		525 00
H. D. Root		7 00
W. W. Spalding		1,363 00
P. C. Sletten		1,800 00
H. W. Stone		1,200 00
R. G. Stuart		3,831 12
E. B. Sanders		1,096 00
Samuel W. Sherfey		1,138 33
E. S. Salisbury		2,425 00
W. H. Somers		562 50
C. H. Smith		247 50
Saint Louis and San Francisco R. R		1 89
Simpson Brothers & Co		2 95
Star Union Line		89
Sioux City and Pacific R. R		93
Arthur J. Shaw		44 00
E. G. Swanstrom		450 00
A. A. Tufts		1,204 00
John Taffe		1,350 00
C. N. Thornbury		1,260 00
Wm. H. Tancre		300 00
J. Wesley Tucker		1,410 00
John Ulrick		275 61
Union Pacific R. R		206 36
Virginia and Truckee R. R		51
Zenas L. Wise		153 00
W. C. Willits		1,583 96
H. A. Wilson		2,154 50
J. L. Wilson		3,390 00
J. S. Waters		832 00
H. M. Waters		381 00
J. M. Wilkinson		1,000 00
S. C. Wright		180 00
A. O. Whipple		2,584 01
L. G. Willcox		269 00
F. G. Ward		180 00
Thos. Wrong		300 00
		139,704 21
Deduct repayments:		
By Wm. Anyan	$3 75	
H. O. Beatty	68 54	
M. M. Bane	4 50	
Z. T. Burton	300 00	
M. H. Fitch	199 07	
E. J. Jenkins	75 00	
J. F. Rollins	433 34	
Jno. Taffe	150 00	
		1,234 20
		138,470 01
Depredations on public timber, 1883:		
To Atchison, Topeka and Santa Fé R. R		10 00
W. M. Brown		221 46
Wm. M. Clark		7 15
Chicago and Northwestern Rwy		15 50
Chicago, Saint Paul, Minneapolis and Omaha R. R		25 05
Chicago, Burlington and Quincy R. R		17 00
Chicago, Milwaukee and Saint Paul Rwy		77 00
Wm. Callon		28 25
Detroit, Lansing and Northwestern R. R		2 30
Detroit, Grand Haven and Milwaukee Rwy		6 50
Denver and Rio Grande Rwy		100 85
Denver and New Orleans R. R.		90 70
Carried forward		601 76

Depredations on public timber, 1883—Continued.		
Brought forward		$601 76
To Geo. W. Evans		11,778 85
Flint and Pere Marquette R. R.		10 30
Willis Griffith		146 85
Thomas Harlan		312 49
Louisville and Nashville R. R.		34 85
Michigan Central R. R.		8 25
Chas. T. Menzel		72 00
Missouri Pacific Rwy		60 15
E. W. Mowry		84 50
Frank Marklo		1 97
Milwaukee, Lake Shore and Western Rwy		45 10
Wm. Miller		107 00
New Mexico and Arizona R. R.		13 90
Northern Pacific Rwy		245 25
Oregon Rwy. and Navigation		51 75
Ohio and Mississippi Rwy		3 50
Pennsylvania R. R		367 20
Saint Louis and San Francisco Rwy		30 95
E. B. Sanders		25 10
The Saint Paul and Duluth R. R.		9 80
Utah Central Rwy		27 50
Virginia and Truckee R. R		11 00
John H. Welch		224 79
		14,274 72
Deduct repayments:		
By Henry C. De Ahna	$66 67	
Webster Eaton	82 75	
Geo. W. Evans	1,362 57	
E. W. Oyster	360 71	
G. W. Story	56 82	
		1,929 52
		12,345 20
Depredations on public timber, 1884:		
To Atchison, Topeka and Santa Fé R. R		479 90
Atlantic and Pacific R. R		320 75
Alabama Great Southern R. R		26 60
Burlington and Missouri River R. R. in Nebraska		33 15
Baltimore and Ohio R. R		118 85
Thomas Burnside		219 30
Carson and Colorado R. R		66 00
Chicago, Milwaukee and Saint Paul Rwy		153 00
Chicago and Alton R. R		29 60
Chicago, Burlington and Quincy R. R		14 30
Chicago, Saint Paul and Minneapolis and Omaha Rwy		92 45
Canadian Pacific Rwy		78 85
California Southern R. R.		3 75
Chicago and Northwestern Rwy		32 15
Central Pacific R. R		171 16
Henry C. De Ahna		1,912 50
Detroit, Lansing and Northern R. R		13 55
Detroit, Mackinac and Marquette R. R		38 95
Detroit, Grand Haven and Milwaukee Rwy		6 55
Denver and Rio Grande Rwy		213 20
Geo. W. Evans		62,000 00
Webster Eaton		1,000 00
Florida Southern Rwy		25 25
Flint and Pere Marquette R. R.		1 55
Georgia Pacific Rwy		2 70
Grand Rapids and Indiana R. R.		25 55
Illinois Central R. R		44 45
Bascom S. Jacobs		1,114 64
Kansas City, Saint Joseph and Council Bluffs R. R.		5 94
Louisville and Nashville R. R.		73 30
W. H. La Count		5 00
Carried forward		68,322 94

Depredations on public timber, 1884—Continued.		
Brought forward		$68,322 94
To Missouri Pacific Rwy		229 40
Michigan Central R. R		33 15
Maria C. Menzee		218 05
Milwaukee, Lake Shore and Western Rwy		77 55
Charles T. Menzee		27 78
William Miller		919 70
Memphis and Little Rock R. R.		26 30
Marquette, Houghton and Ontonagon R. R.		11 14
W. B. Mitchell		30 75
Marsh & Sullivan		6 00
Northern Pacific R. R		382 80
New Mexico and Arizona R. R.		47 10
New Orleans and Northeastern R. R.		3 95
Overland Stage Company		20 00
Edward Outhwaite		40 00
Pennsylvania R. R		79 55
J. W. Parker		60 00
Pacific Coast and Steamship Company		12 50
Charles F. Perkins		20 00
C. W. Reichel		5 00
W. N. Rohrer		5 00
Geo. W. Story		1,226 45
Saint Louis and San Francisco Rwy		61 50
Prosper A. Smith		11 25
Saint Paul and Duluth R. R.		74 40
E. B. Sanders		23 75
Saint Louis, Salem and Little Rock R. R		1 65
Fred. Steinger		6 00
Warren F. Travis		418 45
Texas and Saint Louis Rwy		7 10
Utah and Nevada Rwy		4 00
Union Central R. R		5 50
Union Pacific R. R		489 67
Utah Central R. R		25 50
Virginia and Truckee R. R.		18 00
Virginia Midland Rwy		44 95
J. M. Wilkinson		1 50
		72,998 33
Deduct repayment:		
By Webster Eaton		113 55
		72,884 78
Protecting public lands, 1883 and 1884:		
To Atchison, Topeka and Santa Fé R. R		265 55
Alabama Great Southern R. R.		9 10
Atlantic and Pacific R. R.		15 40
H. E. Allen		575 65
F. T. Bickford		1,200 00
Burlington and Missouri River R. R		15 80
Baltimore and Ohio R. R.		195 15
W. W. Burke		298 55
Chicago and Northwestern Rwy		13 95
Chicago, Milwaukee and Saint Paul Rwy		48 50
Chicago, Saint Paul, Minneapolis and Omaha R. R.		24 00
Chicago, Rock Island and Pacific Rwy		5 22
Chicago, Burlington and Quincy R. R		37 30
Edward Davis		29 43
Detroit, Mackinaw and Marquette R. R		6 00
Denver and Rio Grande Rwy		39 50
Detroit, Grand Haven and Milwaukee R. R		1 40
H. H. Eddy		2,054 16
Carried forward		4,834 66

Protecting public lands, 1883 and 1884—Continued.		
Brought forward		$4,834 66
To East Tennessee, Virginia and Georgia R. R		1 40
Geo. W. Evans		33,173 25
Webster Eaton		800 00
W. H. Goshen		600 00
Steamer Humboldt		25 00
F. D. Hobbs		316 05
R. Joseph		178 67
Edward Johnson		250 00
Kansas City, Lawrence and Southern R. R		8 03
Kansas City, Saint Joseph and Council Bluffs R. R		10 74
Louisville and Nashville R. R.		48 40
Michigan Central R. R.		40 65
Missouri Pacific Rwy		29 37
Minneapolis and Saint Louis Rwy		4 25
Missouri and Pend d'Oreille Stage Company		10 75
Northern Pacific R. R.		321 40
New York, Lake Erie and Western R. R		44 15
Oregon Rwy. and Navigation		147 60
Ohio and Mississippi R. R		10 00
Overland Stage Company		20 00
Pennsylvania R. R		161 85
Saint Louis and San Francisco Rwy		6 24
Saint Paul and Duluth R. R		10 00
Southern Kansas Rw'y		4 24
James Tullis		88 15
Utah Central Rw'y		2 00
Virginia Midland Rw'y		22 05
		41,168 90
Deduct repayments:		
By F. T. Bickford	$131 30	
George W. Evans	1,405 99	
Webster Eaton	78 34	
H. H. Eddy	199 29	
		1,814 92
		39,353 98
Protecting public lands, 1884:		
To Atchison, Topeka and Santa Fé R. R		415 29
Alabama Southern R. R		22 05
Burlington and Missouri River R. R		13 30
Lucien J. Barnes		94 30
Baltimore and Potomac R. R.		3 25
Uriah Bruner		7 03
William W. Burke		1 45
Chesapeake and Ohio Rw'y		17 50
Chicago and North Western Rw'y		24 95
Chicago and Alton R. R		58 75
Chicago, Milwaukee and Saint Paul Rw'y		42 15
Central Pacific R. R		105 52
Chicago, Burlington and Quincy R. R		3 90
Chicago, Saint Paul, Minneapolis and Omaha Rw'y		93 15
Chicago and Grand Trunk Rw'y		25 00
John M. Dunn		582 85
Detroit, Mackinaw and Marquette R. R		12 40
Denver and Rio Grando Rw'y		203 25
Edward Davis		26 00
George W. Evans		34,000 00
Webster Eaton		2,981 00
H. H. Eddy		4,925 96
East Tennessee, Virginia and Georgia Rw'y		4 90
Flint and Pere Marquette R. R		5 55
Florida Southern Rw'y		7 00
Carried forward		43,676 50

Protecting public lands, 1884—Continued.		
Brought forward		$43,676 50
To Grand Rapids and Indiana R. R		13 50
Florida Transit and Peninsular R. R		14 50
H. J. Harrison		278 80
W. H. Goucher		1,500 00
Kansas Pacific Rw'y		2 00
Louisville and Nashville R. R		57 15
William Miller		91 65
Michigan Central R. R		39 50
Missouri Pacific Rw'y		9 30
James A. McCormick		380 46
Marquette, Houghton and Ontonagon R. R		4 06
A. A. Mabson		46 50
Memphis and Charleston R. R		3 75
Northern Pacific R. R		250 50
George D. Orner		258 50
Ohio and Mississippi Rw'y		21 00
Omaha and Republican Valley R. R		2 35
Pacific Coast Steamship		25 00
Pennsylvania R. R		121 90
Pennsacola and Atlanta R. R.		21 25
Rambusch & Mertz		27 50
Southern Kansas Rw'y		9 69
Saint Paul and Duluth Rw'y.		89 30
Saint Louis and San Francisco Rw'y		28 12
Silver City, Deming and Pacific Rw'y		2 90
Wilson T. Smith		286 17
Sioux City Pacific R. R		2 09
Utah Central Rw'y		2 00
Union Pacific Rw'y		604 88
Virginia Midland Rw'y		30 90
Western Railway of Alabama		32 75
		47,924 47
Indemnity for swamp lands purchased by individuals:		
To State of Florida		6,321 61
State of Illinois		23,072 62
State of Missouri		4,858 10
		34,252 33
Payment to William Prindle:		
To William Prindle		18,838 81
Relief of F. G. Schwatka and wife (act. April 28, 1884):		
To F. G. Schwatka		3,000 00
Amelia Schwatka		3,000 00
		6,000 00
Relief of M. P. Jones (act. May 14, 1884):		
To M. P. Jones		24,597 75
Relief of William L. White (act. May 13, 1884):		
To William L. White		1,333 33
Sale of Fort Larned military reservation, Kansas:		
To George E. Hubbard		382 00
D. N. Heizer		280 00
D. B. Walcott		280 00
		942 00
Relief of Ellen Call Long and Mary K. Brevard:		
To Ellen Call Long and Mary K. Brevard		8,563 37

Five per cent. fund of the net proceeds of the sales of public lands in Arkansas:	
To State of Arkansas	$3,365 85
Five per cent. fund of the net proceeds of the sales of public lands in Michigan:	
To State of Michigan	26,115 40
Five per cent. fund of the net proceeds of the sales of public lands in Minnesota:	
To State of Minnesota	31,507 06
Five per cent. fund of the net proceeds of the sales of public lands in Oregon:	
To State of Oregon	5,277 21
Five per cent. fund of the net proceeds of the sales of public lands in Nebraska:	
To State of Nebraska	29,242 62
Five per cent. fund of the net proceeds of the sales of public lands in Wisconsin:	
To State of Wisconsin	25,748 16
Five per cent. fund of the net proceeds of the sales of public lands in Kansas:	
To State of Kansas	26,636 22
Five per cent. fund of the net proceeds of the sales of public lands in Florida:	
To State of Florida	11,231 28
Five per cent. fund of the net proceeds of the sales of public lands in Louisiana:	
To State of Louisiana	$22,773 51
Five per cent. fund of the net proceeds of the sales of agricultural lands in Colorado:	
To State of Colorado	4,952 51
Two per cent. fund of the net proceeds of the sales of public lands in Mississippi:	
To State of Mississippi	14,071 61
Five per cent. fund of the net proceeds of the sales of public lands in Missouri:	
To State of Missouri	3,067 55
Two per cent. fund of the net proceeds of the sales of public lands in Alabama:	
To State of Alabama	3,917 41
Three per cent. fund of the net proceeds of the sales of public lands in Mississippi:	
To State of Mississippi	21,107 41
Three per cent. fund of the net proceeds of the sales of public lands in Missouri:	
To State of Missouri	4,601 32
Three per cent. fund of the net proceeds of the sales of public lands in Alabama:	
To State of Alabama	5,876 14

INTERNAL REVENUE.

Salaries and expenses of agents and subordinate officers, 1881:	
To Chicago, Rock Island and Pacific R. R.	$9 51
H. A. Hebard	143 00
O. E. Hofer	35 00
J. J. Mott	39 00
J. H. Rives	2 95
Saint Louis and San Francisco Rwy	1 62
	231 08
Salaries and expenses of agents and subordinate officers, 1881 and prior years:	
By T. J. Hobbs	$0 39
Salaries and expenses of agents and subordinate officers, 1882:	
To American Rapid Telegraph Company	15
Atchison, Topeka and Santa Fé R. R	2 25
Baltimore and Ohio R. R	2 58
Chicago, Rock Island and Pacific Rwy	21 32
E. B. Grimes	10 12
T. J. Hobbs	192 04
National Academy of Science	232 05
C. W. Pavy	12 00
Saint Louis and San Francisco Rwy	2 23
W. J. Wilmore	2 20
	476 94
Deduct repayment:	
By Secretary of the Treasury	150 00
	326 94
Salaries and expenses of agents and subordinate officers, 1883:	
To Adams Express Company	$2,448 11
W. O. Austin	21 30
American Rapid Telegraph Company	35
Atchison, Topeka and Santa Fé R. R	3 94
Baltimore and Ohio Express	5 50
Baltimore and Ohio Telegraph Company	26 76
Baltimore and Ohio R. R	5 35
E. F. Blodgett	18 00
L. A. Bristol	24 60
C. H. Burns	1 00
J. L. Brown	4 50
A. H. Brooks	26 85
F. Buell	8 00
W. H. Bliss	230 00
L. D. Barnes	6 15
H. H. D. Byron	33 80
H. C. Bayly	11 10
J. E. Boyd	290 00
J. E. Beall	4 00
H. H. Bandinot	24 32
B. B. Botts	4 25
L. E. Clark	6 80
J. D. Carter	51 55
S. R. Crumbaugh	5,723 00
E. Cunningham	9 12
G. Clemen	98 01
W. H. Chapman	80 03
A. M. Crane	147 60
M. H. Creager	113 37
Chicago, Rock Island and Pacific Rwy	8 62
Central Pacific R. R	88 72
J. S. Cozine	47 00
H. Crawford	70 45
Carried forward	9,642 15

Salaries and expenses of agents and subordinate officers, 1883—Continued.		
Brought forward		$9,642 15
To Chicago, Milwaukee and Saint Paul Rwy		1 16
H. M. Cooper		47 00
J. C. Cartwright		188 00
A. B. Carroll		42 00
J. A. Connolly		1,005 00
T. N. Cooper		152 50
J. H. Coffin		503 58
B. H. Dodson		8 35
O. G. Daniels		101 15
W. H. Eggborn		3 62
C. W. Eldridge		65 75
H. H. Fultz		3 70
W. H. Fuller		3 99
F. C. Furguson		30 00
J. T. Goodman		84 25
P. N. Geister		12 69
R. M. Goodall		7 50
T. J. Grimeson		104 66
O. D. M. Gaddis		6 35
R. T. Gibson		184 75
T. J. Hobbs		63,997 00
D. H. Howard		54 10
W. L. Hollister		85 92
J. H. Hale		79 30
C. B. Harrison		86 15
G. W. Hazelton		645 00
G. W. Hamilton		15 39
J. D. Harvey		87 65
A. M. Hughes, jr		3 50
J. A. Holtzclaw		40 75
Internal Revenue Record		185 54
S. S. Jennings		52 00
W. H. Johnson		78 00
J. T. Kinney		143 48
H. Kellogg		116 99
J. M. Knapp		32 00
A. A. Knight		156 97
E. Kelley		1,250 00
A. M. Lawson		12 60
J. E. Larkin		147 85
J. Lofland		79 61
R. H. Leonard		150 00
J. B. Leake		110 00
B. C. Ludlow		36 00
W. H. Lawson		48 50
Mutual Union Telegraph Company		2 05
J. M. Melton		1,572 25
L. Morrow		14 50
E. McLeer		58 30
P. H. McGowan		130 00
J. B. Marvin		149 62
J. B. McCoy		115 63
H. McKay		28 00
C. H. Mallory & Co., agent		61 94
Missouri Pacific Rwy		8 18
A. H. Morgan		57 30
F. S. Neustadtl		14 50
J. C. Napier		6 85
National Academy of Science		22 15
M. D. O'Connell		80 00
J. T. Peden		25 00
L. J. Parker		4 85
T. Powers		132 32
J. Packard		125 20
S. Plummer		192 52
G. W. Post		24 00
P. S. Prim		28 25
Pennsylvania Company		3 99
P. N. Pennebaker		6 85
H. R. Probasco		94 15
J. M. Raum		143 10
E. Root		400 00
F. S. H. Reynolds		51 50
J. H. Rives		2 00
A. S. Snow		7 00
Sioux City and Pacific R. R		42 97
E. B. Selvidge		162 20
Carried forward		74,017 47

Salaries and expenses of agents and subordinate officers, 1883—Continued.		
Brought forward		$74,017 47
To A. C. Sharpe		40 30
W. Somerville		95 74
D. D. Spaulding		220 95
F. D. Sewall		43 43
J. E. Simpson		40 00
Southern Telegraph Company		1 25
J. V. Smith		30 35
E. Scull		153 00
W. S. Streater		10 37
Star Union Line		7 50
J. L. Trumbull		67 25
G. Tagliabue		2,033 40
L. A. Thrasher		99 50
Treasury Department		2,823 95
G. E. Tinker		6 00
E. R. Tinker		110 00
W. Umdenstock		24 00
Union Pacific R. R		145 47
Underhill & Adams		105 83
R. Williams		240 00
Western Union Telegraph Company		213 78
K. W. Weber		19 45
J. T. Wilson		61 10
E. D. Webster		102 90
J. C. Wheeler		202 40
G. W. Wilson		132 03
J. Wagner		114 25
W. S. Wetzel		1 69
E. A. White		138 00
W. H. Wheeler		72 00
West Publishing Company		3 65
J. E. Youngberg		14 80
		91,033 96
Deduct repayments:		
By L. Buckner	$359 00	
W. Bruce	65 00	
J. E. Blaine	45 00	
E. M. Brayton	42 00	
M. Boggs	8 00	
B. B. Botts	96 00	
F. Buell	4 00	
W. Cumback	84 00	
H. M. Cooper	66 00	
T. N. Cooper	1,648 00	
A. B. Carroll	45 00	
G. P. Dunham	16 00	
G. B. Everitt	270 00	
J. W. Finnell	132 00	
J. D. Harvey	120 00	
A. M. Hughes	48 00	
T. J. Hobbs	4,493 81	
W. H. Johnson	69 00	
H. Knowles	76 00	
W. J. Landram	220 00	
C. B. Montgomery	4 00	
J. M. Melton	30 00	
H. McKay	2 00	
W. J. Pollock	76 00	
L. M. Pleasant	81 00	
F. H. Pierpont	25 00	
J. H. Rives	42 00	
L. P. Sherman	144 00	
A. M. Swope	172 00	
E. Skull	168 00	
W. Umdenstock	2 50	
A. Woodcock	40 00	
		8,693 31
		82,340 65
Salaries and expenses of agents and subordinate officers, 1884:		
To A. Bingham, 1st Alabama		2,325 00
F. M. Shouse, 2d Alabama		208 00
H. M. Cooper, Arkansas		12,037 00
C. Hartson, 1st California		21,572 00
A. L. Frost, 4th California		5,569 00
Carried forward		41,711 00

Salaries and expenses of agents and subordinate officers, 1884—Continued.	
Brought forward	$41,711 00
To J. Selden, Connecticut	2,504 00
W. H. Johnson, Georgia	40,725 30
L. M. Pleasants, Georgia	131 50
R. W. Berry, Idaho	104 00
J. D. Harvey, 1st Illinois	31,196 00
L. B. Crooker, 2d Illinois	1,252 00
R. Rowett, 4th Illinois	4,504 00
H. Knowles, 5th Illinois	52,312 00
D. B. House, 8th Illinois	47 50
J. Merriam, 8th Illinois	1,245 50
J. Wheeler, 8th Illinois	5,377 00
C. W. Pavy, 13th Illinois	3,852 00
J. C. Veatch, 1st Indiana	286 00
W. Cumback, 4th Indiana	1,560 00
H. McKay, 6th Indiana	28,530 00
W. W. Carter, 7th Indiana	9,701 00
T. M. Kirkpatrick, 11th Indiana	2,374 00
J. W. Green, 2nd Iowa	9,256 00
J. E. Simpson, 3d Iowa	414 00
L. P. Sherman, 5th Iowa	1,044 00
J. C. Carpenter, Kansas	2,416 00
R. S. Crumbaugh, 2d Kentucky	26,275 00
E. Farley, 2d Kentucky	34,480 00
L. Buckner, 5th Kentucky	191,545 00
J. W. Finnell, 6th Kentucky	53,856 00
A. M. Swope, 7th Kentucky	72,240 00
W. J. Landram, 8th Kentucky	60,757 00
J. E. Blaine, 9th Kentucky	1,022 00
J. H. Sellman, 3d Maryland	30,585 00
W. Bruce, 4th Maryland	1,046 00
C. W. Slack, 3d Massachusetts	16,668 00
C. C. Dame, 5th Massachusetts	868 00
E. R. Tinker, 10th Massachusetts	2,720 00
I. H. Sturgeon, 1st Missouri	16,212 00
A. B. Carroll, 2d Missouri	125 00
D. A. Stewart, 4th Missouri	939 00
B. H. Langston, 5th Missouri	318 25
P. Doppler, 6th Missouri	16,302 00
T. P. Fuller, Montana	1,028 00
G. W. Post, Nebraska	6,600 00
H. M. Putney, New Hampshire	1,464 00
C. Barcalow, 3d New Jersey	3,708 00
R. C. Ward, 1st New York	7,136 00
Jas. S. Smart, 15th New York	6 00
J. Armstrong, 21st New York	1,748 00
H. S. Pierce, 28th New York	7,304 00
F. Buell, 30th New York	576 00
I. J. Young, 4th North Carolina.	9,608 00
W. H. Wheeler, 5th North Carolina	47,339 00
T. N. Cooper, 6th North Carolina.	158,146 00
C. B. Montgomery, 1st Ohio	47,404 00
R. Williams, jr., 3d Ohio	312 00
R. P. Kennedy, 4th Ohio	156 00
G. P. Dunham, 6th Ohio	7,644 00
J. F. Kumler, 10th Ohio	6,365 00
M. Boggs, 11th Ohio	8,081 00
J. Palmer, 15th Ohio	260 00
W. S. Streater, 18th Ohio	8,206 00
J. C. Cartwright, Oregon	1,252 00
W. Pollock, 1st Pennsylvania	8,658 00
J. T. Valentine, 8th Pennsylvania	416 00
A. J. Kauffman, 9th Pennsylvania	22,930 00
C. H. Chase, 12th Pennsylvania	11,056 00
C. J. Bruner, 14th Pennsylvania	1,040 00
E. Scull, 16th Pennsylvania	1,404 00
J. F. Walther, 19th Pennsylvania	2,296 00
Carried forward	1,138,664 05

Salaries and expenses of agents and subordinate officers, 1884—Continued.	
Brought forward	$1,138,664 05
To J. C. Brown, 20th Pennsylvania	208 00
T. P. Case, 22d Pennsylvania	51,484 00
S. M. Jackson, 23d Pennsylvania	10,456 00
E. M. Brayton, South Carolina	1[illegible],478 00
J. M. Melton, 2d Tennessee	14,855 00
A. M. Hughes, 5th Tennessee	62,210 00
R. F. Patterson, 8th Tennessee	156 00
B. C. Ludlow, 3d Texas	1,713 00
W. Umbdenstock, 4th Texas	2,921 00
O. H. Russell, 3d Virginia	78 00
J. B. Raulston, 4th Virginia	5,201 00
J. H. Rives, 5th Virginia	422 00
B. B. Botts, 6th Virginia	2,210 00
W. E. Craig, 6th Virginia	22,594 00
L. F. Duval, 1st West Virginia	5,538 00
F. H. Pierpont, 2d West Virginia	338 00
I. M. Bean, 1st Wisconsin	15,128 00
H. M. Kutchin, 3d Wisconsin.	1,479 00
Adams Express Co	2,702 68
J. L. Adkins	9 00
American Rapid Telegraph Co	55
J. F. Anderson	8 25
B. D. Avis	56 76
I. C. Ash	14 60
M. Augenstein	275 00
A. H. Brooks	600 90
Baltimore and Ohio Express	62 37
L. D. Barnes	29 38
Baltimore and Ohio Telegraph Co	53 24
C. A. Bates	20 45
J. E. Beall	24 00
H. H. Boudinot	10 68
Bankers and Merchants' Telegraph Co	65
J. E. Boyd	340 00
D. S. Bowers	26 90
S. M. Babb	6 50
W. H. Brown	196 55
L. A. Bristol	70 75
E. F. Blodgett	31 50
J. L. Brown	12 40
H. H. Bliss	260 00
Baltimore and Ohio R. R.	15 70
Jno. M. Burns	63 15
W. T. Clark	1,296 28
W. C. & F. P. Church	2,223 22
A. H. Clark	1,244 09
W. H. Chapman	815 41
A. M. Crane	996 80
C. Chesley	24 35
J. A. Crawford	30 25
L. E. Clark	16 80
Jno. Carlin	5 40
Jno. Corwin	89 55
C. S. Cozine	14 25
R. J. Chesnutwood	8 55
Central Pacific R. R.	338 74
Chicago, Rock Island and Pacific Railway	16 04
J. H. Coffin	930 20
J. H. Cox	4 00
G. Clements	232 29
H. F. Dorton	36 94
E. V. Donelson	836 33
S. A. Darnell	65 00
B. H. Dodson	11 65
W. H. Eggborn	30 55
W. Evans, Commissioner	25 75
C. F. Eberman	37 68
R. E. Evans	24 41
A. J. Frick	3 80
H. Flagans	19 10
F. C. Ferguson	40 00
H. H. Fultz	9 40
Carried forward	1,366,451 84

Salaries and expenses of agents and subordinate officers, 1884—Continued.		
Brought forward		$1,366,451 84
To H. Fromer	75 95	
H. W. Fick	25 75	
W. H. Fuller	2 99	
T. J. Grimeson	1,191 48	
C. M. Green	97 00	
J. T. Goodman	191 25	
T. J. Hobbs	849,000 00	
J. H. Hale	1,189 67	
W. L. Hollister	1,228 57	
C. B. Harrison	699 95	
D. H. Howard	152 60	
C. L. Holstein	750 00	
G. W. Hazelton	125 00	
J. R. Henderson	170 50	
J. A. Holtzclow	47 95	
G. W. Hamilton	11 79	
J N. Hamilton	11 05	
J. E. Hacker	11 70	
G. W. Hawes	1 00	
J. H. Harris	8 25	
T. D. Irish	3 10	
H. Kellogg	1,355 12	
A. A. Knight	409 60	
T. J. Kinney	918 89	
E. Kelley	3,750 00	
Key West Mail Line	14 47	
P. E. Kuhle	8 75	
Kansas Pacific Rwy	68 94	
J. E. Larkin	1,388 65	
J. Lofland	955 08	
A. M. Lawson	34 95	
J. B. Leake	290 00	
D. S. Lewis	100 00	
W. Lay	1,032 77	
J. M. C. Lang	172 50	
C. M. Lassiter	77 75	
P. H. McGowan	555 40	
D. K. Miller Lock Company	1,337 00	
J. M. Meek	300 00	
J. B. Marvin	1,647 76	
J. B. McCoy	1,187 95	
E. McLeer	1,139 58	
C. H. Mallory & Co	155 53	
E. Morrison	26 05	
L. Morrow	27 50	
A. McClaim	100 00	
W. J. Malone	9 25	
P. T. Massey	25 50	
Missouri Pacific Rwy	11 62	
P. M. McRoberts	6 23	
H. J. McKusick	49 90	
F. S. Neustadlt	1,356 99	
E. A. Nichels	15 49	
Oregon Railway and Navigation Company	14 14	
T. Powers	1,273 03	
J. Packard	1,719 35	
P. N. Pennebaker	42 45	
S. Plummer	1,460 24	
Pennsylvania Company	18 42	
E. S. Prime	82 25	
F. M. Page	17 75	
R. G. Patterson	132 00	
R. Park	10 50	
J. T. Pedan	18 00	
J. M. Baum	1,358 46	
J. A. Ray	1,003 61	
T. J. Riskman	7 00	
H. C. Rainey	6 75	
W. Somerville	539 42	
D. D. Spaulding	1,602 00	
E. B. Selvidge	729 50	
F. D. Sewall	295 29	
T. Slaight	3,000 00	
Southern Telegraph Company	82	
F. D. Stine	5 20	
R. H. Sterling	29 50	
L. W. Shedd	7 10	
J. Smith	115 50	
Carried forward		2,253,464 89

Salaries and expenses of agents and subordinate officers, 1884—Continued.		
Brought forward		$2,253,464 89
To C. C. Sheats	6 20	
C. J. Stolbrand	36 70	
Star Union Line	47 10	
A. C. Sharp	121 00	
W. A. Stone	250 00	
G. Tagliabue	6,615 60	
L. A. Trasher	1,201 78	
J. L. Trumbull	1,005 90	
Treasury Department	15,859 22	
G. W. Thomas	10 00	
Union Pacific R. R	649 81	
D. W. Vogles	870 55	
O. J. Vaughn	6 90	
G. W. Wilson	660 77	
E. D. Webster	1,151 98	
J. Wagner	1,391 08	
J. T. Wilson	766 42	
Western Union Telegraph Company	755 02	
Geo. W. Williams	82 60	
M. C. Wade	2 60	
C. W. Wisner	9 90	
K. W. Weber	9 10	
G. S. Watson	23 90	
West Publishing Company	6 35	
Wm. S. Whitten	7 90	
J. J. Young	756 30	
J. E. Youngberg	78 20	
S. M. Zacharias	10 26	
		2,285,858 03
Deduct repayments:		
By W. H. Johnson, 2d Georgia	$132 00	
L. M. Pleasants, 3d Georgia	38 50	
W. Cumback, 4th Indiana	66 00	
L. P. Sherman, 5th Iowa	276 00	
S. R. Crumbaugh, 2d Kentucky	41 00	
E. Farley, 2d Kentucky	309 00	
A. M. Swope, 7th Kentucky	224 00	
W. L. Landram, 8th Kentucky	262 00	
J. E. Blaine, 9th Kentucky	21 00	
J. H. Selman, 3d Maryland	31 00	
G. H. Post, Nebraska	4 00	
R. Williams, jr., 3d Ohio	64 00	
C. J. Bruner, 14th Pennsylvania	6 00	
E. Scull, 16th Pennsylvania	9 00	
J. M. Melton, 2d Tennessee	141 00	
A. M. Hughes, 5th Tennessee	44 00	
B. B. Botts, 6th Virginia	45 00	
F. N. Pierpont, 2d West Virginia	21 00	
		1,734 50
		2,284,123 53
Salaries and expenses of collectors of internal revenue, 1882:		
To Morris Marks, Louisiana		44 70
Moses D. Stivers, 11th New York		17 64
Eugene Tisdale, 3d Louisiana.		04
Carried forward		62 38

Salaries and expenses of collectors of internal revenue, 1882—Continued.		
Brought forward		$62 38
Deduct repayment:		
By F. J. Rollins, Maine		41 24
		21 14
Salaries and expenses of collectors of internal revenue, 1883:		
To S. W. Fisher, Arizona		154 84
C. Hartson, 1st California		257 73
A. L. Frost, 4th California		405 95
Joseph Sheldon, 1st Connecticut		82 48
D. F. Hollister, 2d Connecticut		242 23
Jas. McIntire, Delaware		37 75
J. L. Pennington, Dakota		48 30
Dennis Eagan, Florida		32 06
Walter H. Johnson, 2d Georgia		164 23
L. M. Pleasant, 3d Georgia		9 41
R. W. Perry, Idaho		360 20
J. D. Harney, 1st Illinois		200 10
L. B. Crooker, 2d Illinois		28 16
A. Woodcock, 3d Illinois		553 00
Howard Knowles, 5th Illinois		111 35
John W. Hill, 7th Illinois		18 00
J. Marriam, 8th Illinois		86 80
Charles W. Pavey, 13th Illinois		40 07
Will Cumback, 4th Indiana		90 77
William Wharter, 7th Indiana		70 20
D. W. Minshall, 7th Indiana		428 50
T. M. Kirkpatrick, 11th Indiana		26 22
James E. Simpson, 3d Iowa		150 24
John Connell, 4th Iowa		475 79
L. P. Sherman, 5th Iowa		494 29
John C. Carpenter, Kansas		111 24
S. R. Crumbaugh, 2d Kentucky		2,089 52
W. A. Stuart, 2d Kentucky		48 94
Lewis Buckner, 5th Kentucky		250 00
John W. Finnell, 6th Kentucky		74 55
A. W. Swope, 7th Kentucky		59 27
Wm. J. Landram, 8th Kentucky		294 00
J. E. Blaine, 9th Kentucky		244 10
Morris Marks, Louisiana		205 00
George Drury, Louisiana		104 25
Frank Rollins, Maine		40 78
Thomas P. Fuller, Montana		92 00
Isaac H. Sturgeon, 1st Missouri		315 70
Alonzo B. Carroll, 2d Missouri		188 87
B. H. Langston, 5th Missouri		153 40
Phillip Doppler, 6th Missouri		562 50
C. W. Slack, 3d Massachusetts		212 00
C. C. Dame, 5th Massachusetts		159 94
E. R. Tinker, 10th Massachusetts		87 90
C. J. Ditty, 3d Maryland		502 39
J. H. Sellman, 3d Maryland		130 25
Webster Bruce, 4th Maryland		132 60
A. C. Wedge, 1st Minnesota		100 40
Wm. Bickell, 2d Minnesota		193 50
J. H. Stone, 1st Michigan		139 98
H. B. Rowlson, 2d Michigan		64 30
C. W. Watkins, 4th Michigan		17 09
Sluman S. Bailey, 4th Michigan		15 20
Henry C. Ripley, 6th Michigan		82 70
Henry Putney, New Hampshire		196 75
Carried forward		11,437 79

Salaries and expenses of collectors of internal revenue, 1883—Continued.		
Brought forward		$11,437 79
To R. C. Ward, 1st New York		181 72
M. B. Blake, 2d New York		97 57
M. Friedsam, 3d New York		248 38
M. D. Stivers, 11th New York		27 88
J. M. Johnson, 12th New York		327 64
J. W. Bentley, 14th New York		55 60
James S. Smart, 15th New York		127 52
Jas. Armstrong, 21st New York		59 42
J. C. P. Kincaid, 21st New York		15 34
J. N. Knapp, 24th New York		456 11
Benj. De Voe, 26th New York		170 05
H. S. Pierce, 28th New York		130 24
Frederick Bull, 30th New York		79 00
Wm. P. Tatem, 1st New Jersey		50 50
Culver Barcalow, 3d New Jersey		295 75
R. B. Hathorn, 5th New Jersey		115 50
E. A. White, 2d North Carolina		96 15
I. J. Young, 4th North Carolina		13 55
Geo. B. Everitt, 5th North Carlina		93 64
Thos. N. Cooper, 6th North Carolina		69 78
George W. Post, Nebraska		92 25
Lorenzo Crounse, Nebraska		145 70
G. A. Smith, New Mexico		17 50
Frederick Lord, Nevada		124 44
Robert Williams, jr., 3d Ohio		1,491 16
George P. Dunham, 6th Ohio		434 00
C. C. Walcutt, 7th Ohio		197 99
Clark Wagoner, 10th Ohio		3 60
John F. Kumler, 10th Ohio		19 28
C. B. Montgomery, 10th Ohio		191 27
W. S. Streater, 18th Ohio		207 90
John C. Cartwright, Oregon		256 00
William J. Pollock, 1st Pennsylvania		199 75
J. T. Valentine, 8th Pennsylvania		72 16
A. J. Kauffman, 9th Pennsylvania		81 50
E. H. Chase, 12th Pennsylvania		258 38
C. J. Bruner, 14th Pennsylvania		185 36
Edward Scull, 16th Pennsylvania		168 84
James C. Brown, 20th Pennsylvania		38 95
F. P. Chase, 22d Pennsylvania		172 42
S. W. Jackson, 23d Pennsylvania		331 05
E. H. Rhodes, Rhode Island		582 75
C. M. Brayton, South Carolina		168 97
William H. Sinclair, 1st Texas		127 40
B. C. Ludlow, 3d Texas		209 77
Wm. Umbdenstock, 4th Texas		151 91
J. M. Melton, 2d Tennessee		1,368 30
A. M. Hughes, jr., 5th Tennessee		509 50
W. H. Woodsock, 5th Tennessee		63 10
R. F. Patterson, 8th Tennessee		62 05
O. J. Hollister, Utah		15 00
J. C. Stearns, Vermont		3 93
O. H. Russell, 3d Virginia		92 18
J. B. Raulston, 4th Virginia		102 23
J. H. Rives, 5th Virginia		141 09
B. B. Botts, 6th Virginia		84 21
Carried forward		22,521 02

Salaries and expenses of collectors of internal revenue, 1883—Continued.

Brought forward		$22,521 02
To I. H. Duval, 1st West Virginia		60 60
F. H. Pierpont, 2d West Virginia		250 00
I. M. Bean, 1st Wisconsin		105 45
H. Harnden, 21 Wisconsin		36 75
H. M. Kutchin, 3d Wisconsin		190 05
L. Lottridge, 6th Wisconsin		157 10
J. R. Haydon, Washington Territory		138 30
		23,459 27
Deduct repayments:		
By A. L. Morgan, 1st Alabama	$33 33	
H. M. Cooper, Arkansas	22 00	
J. S. Wolfe, Colorado	65 25	
A Woodcock, 3d Illinois	901 18	
R. Rowett, 4th Illinois	103 22	
J. C. Veatch, 1st Indiana	$77 25	
H. McKay, 6th Indiana	89 99	
Jno. W. Green, 2d Iowa	87 75	
J. E. Blaine, 9th Kentucky	81 70	
Geo. Drury, Louisiana	114 25	
D. A. Stewart, 4th Missouri	76 00	
F. J. Rollins, Maine	83 00	
H. C. Ripley, 6th Michigan	29 25	
R. P. Kennedy, 4th Ohio	315 07	
M. Boggs, 11th Ohio	531 64	
Jewitt Palmer, 15th Ohio	104 19	
J. C. Cartwright, Oregon	248 96	
E. Scull, 16th Pennsylvania	125 02	
C. M. Lynch, 19th Pennsylvania	89 40	
E. M. Brayton, South Carolina	63 63	
J. C. Stearns, Vermont	51 61	
J. D. Brady, 2d Virginia	144 10	
F. H. Pierpont, 2d West Virginia	3 09	
E. P. Snow, Wyoming Territory	91 80	
		3,532 68
		19,926 59
Salaries and expenses of collectors of internal revenue, 1884:		
To Henry M. Cooper, Arkansas		15,452 50
A. L. Morgan, 1st Alabama		1,189 74
F. M. Shouse, 2d Alabama		1,501 00
Arthur Bingham, 2d Alabama		18,669 00
S. W. Fisher, Arizona		1,371 54
C. Hartson, 1st California		41,071 04
A. L. Frost, 4th California		23,099 39
J. S. Wolfe, Colorado		18,066 62
Joseph Shelden, 1st Connecticut		18,250 02
D. F. Hollister, 2d Connecticut		1,942 73
Jno. L. Pennington, Dakota		1,548 31
Jas. McIntire, Delaware		12,195 97
D. Eagan, Florida		13,816 63
W. H. Johnson, 2d Georgia		41,971 56
L. M. Pleasant, 3d Georgia		1,700 73
Carried forward		211,846 78

Salaries and expenses of collectors of internal revenue, 1884—Continued.

Brought forward	$211,846 78
To R. W. Berry, Idaho	959 92
J. C. Veatch, 1st Indiana	785 20
Will Cumbach, 4th Indiana	1,002 03
Horace McKay, 6th Indiana	15,647 41
W. W. Carter, 7th Indiana	17,471 87
Geo. Moon, 10th Indiana	639 00
T. M. Kirkpatrick, 11th Indiana	12,218 85
J. D. Harvey, 1st Illinois	29,579 81
L. B. Crooker, 2d Illinois	12,597 92
Albert Woodcock, 3d Illinois	669 26
R. Rowett, 4th Illinois	15,760 90
Howard Knowles, 5th Illinois	21,159 95
J. W. Hill, 7th Illinois	1,363 38
J. Merriam, 8th Illinois	2,485 60
Jacob Wheeler, 8th Illinois	10,576 94
D. B. House (acting), 8th Illinois	3,352 08
C. W. Pavey, 13th Illinois	17,454 46
Jno. W. Green, 2d Iowa	16,594 63
J. E. Simpson, 3d Iowa	11,699 73
J. W. Burdette, 4th Iowa	6,801 15
Jno. Connell, 4th Iowa	1,198 72
L. P. Sherman, 5th Iowa	1,944 93
Jno. C. Carpenter, Kansas	15,781 94
S. R. Crumbaugh, 2d Kentucky	11,419 06
E. Farley, 2d Kentucky	12,505 69
Lewis Buckner, 5th Kentucky	36,625 23
J. W. Fennell, 6th Kentucky	19,319 89
A. M. Swope, 7th Kentucky	23,832 30
J. W. Landrum, 8th Kentucky	16,421 22
J. E. Blaine, 9th Kentucky	856 90
Geo. Drury, Louisiana	33,056 00
F. J. Rollins, Maine	9,127 08
J. H. Sellman, 3d Maryland	43,479 58
Webster Bruce, 4th Maryland	814 81
Jas. Hill, Mississippi	19,522 00
C. W. Slack, 3d Massachusetts	29,428 48
C. C. Dame, 5th Massachusetts	1,395 50
E. R. Tinker, 10th Massachusetts	11,329 59
J. H. Stone, 1st Michigan	25,815 81
H. B. Rowlson, 3d Michigan	912 40
C. W. Watkins, 4th Michigan	9,392 18
H. C. Ripley, 6th Michigan	1,004 28
A. C. Wedge, 1st Minnesota	897 27
Wm. Bickel, 2d Minnesota	18,178 12
I. H. Sturgeon, 1st Missouri	32,744 70
A. B. Carroll, 2d Missouri	671 74
D. A. Stewart, 4th Missouri	10,897 18
B. H. Langston, 5th Missouri	925 58
Phil. Doppler, 6th Missouri	19,288 80
T. P. Fuller, Montana	18,354 41
G. A. Smith, New Mexico	1,394 10
S. W. Fisher, New Mexico	9,802 64
F. C. Lord, Nevada	1,574 11
G. W. Post, Nebraska	18,508 52
H. M. Putney, New Hampshire	8,361 21
Wm. P. Tatem, 1st New Jersey	11,411 36
C. Barcalow, 3d New Jersey	13,262 91
R. B. Hathorn, 5th New Jersey	25,798 23
R. C. Ward, 1st New York	42,023 98
M. B. Blake, 2d New York	32,832 93
M. Freidsam, 3d New York	46,510 12
M. D. Stivers, 11th New York	850 62
J. M. Johnson, 12th New York	1,320 70
J. W. Bentley, 14th New York	19,187 55
Jas. S. Smart, 15th New York	17,956 52
Jas. Armstrong, 21st New York	24,407 34
Jno. N. Knapp, 24th New York	837 35
Benj. De Voe, 26th New York	652 06
H. S. Pierce, 28th New York	30,342 64
Carried forward	1,144,843 15

Salaries and expenses of collectors of internal revenue, 1884—Continued.		
Brought forward	$1,144,843 15	
To F. Buell, 30th New York	1,940 28	
E. A. White, 2d North Carolina	842 15	
I. J. Young, 4th North Carolina	35,923 83	
Geo. B. Everett, 5th North Carolina	1,311 08	
W. H. Wheeler, 5th North Carolina	29,381 82	
T. M. Cooper, 6th North Carolina	39,704 09	
C. B. Montgomery, 1st Ohio	34,064 64	
Robert Williams, jr., 3d Ohio	1,418 30	
R. P. Kennedy, 4th Ohio	699 10	
Geo. P. Dunham, 6th Ohio	18,279 28	
Chas. C. Wallcutt, 7th Ohio	806 71	
Jno. F. Kumler, 10th Ohio	21,403 01	
Marcus Boggs, 11th Ohio	17,845 50	
Jewett Palmer, 15th Ohio	618 98	
W. S. Streater, 18th Ohio	23,450 32	
J. C. Cartwright, Oregon	12,563 15	
Wm. J. Pollack, 1st Pennsylvania	47,071 33	
J. T. Valentine, 8th Pennsylvania	2,004 26	
A. J. Kauffman, 9th Pennsylvania	26,424 18	
E. H. Chase, 12th Pennsylvania	21,105 28	
C. J. Bruner, 14th Pennsylvania	1,309 73	
E. Scull, 16th Pennsylvania	1,465 96	
C. M. Lynch, 19th Pennsylvania	636 00	
J. F. Walther, 19th Pennsylvania	11,245 64	
James C. Brown, 20th Pennsylvania	674 44	
F. P. Chase, 22d Pennsylvania	25,746 27	
S. M. Jackson, 23d Pennsylvania	18,606 24	
E. H. Rhodes, Rhode Island	9,374 10	
E. M. Brayton, South Carolina	22,350 44	
J. M. Melton, 2d Tennessee	15,630 04	
A. M. Hughes, jr., 5th Tennessee	26,820 23	
R. F. Patterson, 8th Tennessee	925 96	
Wm. H. Sinclair, 1st Texas	13,221 85	
Benj. C. Ludlow, 3d Texas	13,084 00	
Wm. Umbdenstock, 4th Texas	14,220 49	
O. J. Hollister, Utah	841 31	
J. C. Stearns, Vermont	6,606 04	
Jas. D. Brady, 2d Virginia	39,450 91	
O. H. Russell, 3d Virginia	2,714 60	
J. B. Raulston, 4th Virginia	28,209 91	
J. H. Rives, 5th Virginia	2,842 00	
B. B. Botts, 6th Virginia	1,847 96	
W. E. Craig, 6th Virginia	24,485 00	
Jas. R. Haydon, Washington	1,111 86	
E. P. Snow, Wyoming	644 60	
I. H. Duval, 1st West Virginia	18,902 27	
F. H. Pierpoint, 2d West Virginia	770 90	
I. M. Bean, 1st Wisconsin	15,687 98	
Henry Harndew, 2d Wisconsin	8,426 08	
H. M. Kutchin, 3d Wisconsin	11,918 30	
Leonard Lotteridge, 6th Wisconsin	8,836 00	
		1,830,307 55
Deduct repayments:		
By James Armstrong, 21st New York	$12 68	
M. Boggs, 11th Ohio	19 83	
J. D. Brady, 2d Virginia	42 26	
	74 77	1,830,307 55
Carried forward		

Salaries and expenses of collectors of internal revenue, 1884—Continued.		
Deduct repayments:		
Brought forward	$74 77	$1,830,307 55
By F. P. Case, 22d Pennsylvania	28	
W. W. Carter, 7th Indiana	5 20	
J. C. Cartwright, Oregon	70 12	
G. P. Dunham, 6th Ohio	27 74	
Thomas J. Fuller, Montana	66 32	
J. W. Green, 2d Iowa	81 34	
J. M. Melton, 2d Tennessee	3 15	
H. McKay, 6th Indiana	14 45	
E. Scull, 16th Pennsylvania	28 07	
J. S. Wolfe	19 78	
		391 22
		1,829,916 33
Rebate of taxes on tobacco, act February 14, 1884 (for details of schedules embracing this amount containing several thousand names can be found in the appendix of Internal Revenue Appropriation Ledger No. 8):		
To parties named in schedules		3,535,049 42
Redemption of stamps:		
To amount paid to sundry parties		294,602 38
Deduct repayment:		
By J. H. Day		84
		294,601 54
Repayment of taxes on distilled spirits destroyed by casualty:		
To Bonnie Bros		108 00
Bond & Lillard		40 50
John W. Cable		37 80
R. Cummins & Co		40 50
A. Forda & Sons		36 90
F. Jaeger		120 60
Thomas B. Ripy		207 00
Louis Windholz		36 00
		627 30
Refunding taxes illegally collected:		
To Ferdinand Beezer, 14th Pennsylvania		16 45
Bouvier & Amory		652 68
Eugene S. Balline & Co., 2d New York		3,045 71
Carl Bohne		54 00
J. A. Ball, 4th California		6 25
P. J. Bresnahan, 6th Wisconsin		50 00
Brigham City Mercantile and Manufacturing Association, Utah		14,845 00
John H. Cameron & Co., Arkansas		25 93
Crescenta Club, Maryland		10 28
Chesterfield Bank, 4th Illinois		24 48
Mrs. M. W. Clark		145 80
Dondoren, Filz & Sey, 3d Wis-Wisconsin		8 75
Harden Davis, 4th Virginia		43 05
Dominick & Dickerson		844 59
G. S. Duke, 2d Georgia		93 46
R. C. Davidson, 2d Kentucky		125 00
J. H. Duker & Bro., 4th Illinois		50 00
A. C. Driver		80 00
Carried forward		20,121 43

Refunding taxes illegally collected—Continued.		
Brought forward	$20,121 43	
To Farmers' and Merchants' Bank of Fairburg, Nebr	8 79	
J. H. Flannery, 6th Virginia	6 10	
Jno. B. Fenton, 6th Missouri	37 44	
Germania Bank	666 43	
A. Guckenheimer, 23d Pennsylvania	90	
Giles Rainwater, 5th Kentucky	45 90	
John Hoerr, 1st Missouri	28 80	
Holland City Bank, 4th Michigan	102 38	
James W. Hardy, 2d North Carolina	2 50	
Sam'l D. Hicks, 3d Virginia	7,284 00	
J. L. Harris	52 70	
Isaiah, Mores, Hellman & Co.	734 47	
Mark Jackson, 4th Missouri	139 10	
Eugene Kelly & Co	927 13	
Lessmann & McLoud, Oregon.	12 50	
D. P. Lane, 4th North Carolina	1 10	
F. M. McCormick, 6th Missouri	24 27	
T. J. Miller & Co., 5th Kentucky	146 16	
F. Nauroth, 3d Iowa	5 00	
H. D. Owings	200 42	
T. B. Repy, Kentucky	14 40	
Louis Ries, 4th Missouri	19 29	
Riverdale Distilling Company, 1st Illinois	101 57	
Geo. W. Stover, 12th Pennsylvania	116 93	
Frederick Slitzel, Kentucky.	14 40	
O. F. Sampson, 3d Massachusetts	60	
Spuorlock & Co., Arkansas	188 75	
Memory Turner, Georgia	8 42	
Jno. C. Thompson, 2d Kentucky	137 50	
The Pacific Bank of New York	1,371 40	
The Kansas City (Mo.) Distilling Company	155 70	
Herman Werder, 1st California	223 20	
Wardle & Lee	202 43	
Charles A. Woczack, 24th New York	12 60	
J. B. Wathen & Bro., 5th Kentucky	4 50	
J. O. Worrell, 2d Tennessee	203 14	
Yancey Bros., 2d Georgia	8 55	
R. M. Young	93 60	
	33,424 50	
Refunding moneys erroneously received and covered into the Treasury:		
To Skiles & Kelly	53 48	
E. R. Tinker	58 55	
	112 03	
Refunding taxes to certain citizens of Tennessee:		
To J. J. Bass, executor, estate of James Bass of 5th Tennessee.	20 70	
Jno. C. Cooper, 5th Tennessee	118 80	
R. P. Frerson, administrator of estate of William Little, 5th Tennessee	209 04	
Thomas B. Marks, 5th Tennessee	28 15	
Peyton Randolph, 5th Tennessee	16 50	
William J. Shofner, 5th Tennessee	56 80	
	449 99	

Alteration of dies, plates, and stamps (public resolution March 3, 1883):		
To Government Printing Office	$3,082 62	
Treasury Department	7,449 46	
	10,532 08	
Deduct repayment:		
By T. J. Hobbs, disbursing clerk.	726 00	
	9,806 08	
Stamps, paper, and dies, 1883:		
To Jno. C. Crooke	1,040 56	
Chesapeake and Potomac Telephone Company	18 75	
Neutral Capital Telephone Company	18 75	
Treasury Department	13,711 70	
	14,789 76	
Deduct repayments;		
By Allen & Powers	$23 73	
J. C. Ayer Co	77 58	
J. J. Allen's Sons	75 84	
B. Bendel & Co	62 75	
F. Brown	5 24	
Jos. Burnett & Co	3 58	
Caterson Protz & Co.	2 60	
J. W. Campion & Co.	85	
C. K. Crittenton	5 00	
A. Dougherty	38 69	
Henry Dalley, jr	6 04	
Henry Felton & Bros	37 23	
Seth W. Forole & Son	4 63	
G. G. Green	2 20	
Thomas J. Hobbs, disbursing clerk	2,440 69	
R. P. Hall & Co	8 73	
Hall & Ruckel	9 13	
Jno. F. Henry & Co.	26 24	
E. W. Hoyt & Co	22 50	
E. T. Hazleton	1 02	
Thomas J. Husband	3 76	
Edward Heaton	2 16	
Dr. Harter Medicine Company	9 86	
Holman Liver Pad Company	3 96	
Iron City Match Company	29 57	
Ives & Judd Match Company	199 84	
Dr. Jayne & Son	72 55	
B. J. Kendall & Co	6 38	
Kennedy & Co	4 52	
Kidder & Laird	4 23	
Lyon Manufacturing Company	13 87	
Leeds Robinson & Co	17 72	
Lawrence & Martin	5 85	
Mette & Kand	3 37	
J. H. McLean	21 82	
S. Mansfield & Co.	13 29	
Manhattan Medicine Company	5 48	
A. C. Meyer & Co	7 79	
Merchants' Gargling Oil Company.	2 23	
Dr. C. C. Moore	17 18	
New York Consolidated Card Company	24 43	
Newbauer & Co	16 17	
Perry Davis & Sons.	65 63	
Penn Match Company	145 70	
Portland Star Match Company	200 29	
D. Ransom, Son & Co	4 74	
Radway & Co	15 11	
Carried forward	3,771 77	14,789 76

Stamps, paper, and dies, 1883—Continued.		
Deduct repayments:		
Brought forward.	$3,771 77	$14,789 76
By Russell & Morgan Printing Company	2 42	
H. R. Stevens	1 66	
Saint Louis Mine Company	21 32	
S. R. Segesmond	55	
The Charles A. Vogeler Company	78 97	
Tittlebaum & Macklen	30 86	
The Centaur Company	7 68	
Trenton (N. J.) Match Company	11 82	
Herman Tappan	30 82	
C. B. Woodworth & Sons	25 53	
Weeks & Potter	2 82	
L. W. Warner & Co.	2 21	
Wells, Richardson & Co	1 80	
H. H. Warner & Co.	66 47	
Young, Ladd & Coffin	17 40	
		4,074 10
		10,715 66
Stamps, paper, and dies, 1884:		
To Jno. J. Crooke		4,505 81
Chesapeake and Potomac Telephone Company		56 25
Fairchild Paper Company		34,704 69
T. J. Hobbs		10,000 00
Treasury Department		396,332 77
Treasury United States for credit of miscellaneous receipts on account of sales of Government property		729 09
		446,328 61
Deduct repayment:		
By T. J. Hobbs		2,467 78
		443,860 83
Punishment for violation of internal-revenue laws, 1883:		
To Adams Express Company		1 50
E. M. Brayton		185 00
Lewis Buckner		133 00
A. H. Brooks		654 55
Pitt Barrows		215 48
Wm. M. Bachelor		19 00
T. N. Cooper		3,706 30
W. H. Chapman		269 30
Henry M. Cooper		41 00
S. R. Crumbaugh		7 00
E. D. Crane		1,112 00
Jas. Einstein		25 00
Geo. B. Everitt		87 00
A. M. Hughes, jr		66 00
W. H. Johnson		507 50
Horace Kellogg		268 35
T. J. Kinney		318 78
F. S. Neustadtl		16 00
J. M. Melton		219 00
Jasper Packard		122 28
Geo. Ruppel		50 00
John M. Raum		437 10
John Rooney		1,525 72
J. G. P. Sumner and Wm. M. Bachelor		76 28
A. L. Stanley		55 08
John S. Sanborn		240 25
L. A. Trasher		465 00
L. D. Waddell		21 47
Jacob Wagner		424 60
Isaac J. Young		71 00
Carried forward		11,340 54

Punishment for violation of internal-revenue laws, 1883—Cont'd.	
Deduct repayment:	
Brought forward	$11,340 54
By J. H. Rives	408 01
	10,932 53
Punishment for violation of internal-revenue laws, 1884:	
To A. H. Brooks	8,135 14
Lewis Buckner	972 85
E. M. Brayton	979 00
Wm. M. Bachelor	21 31
Pitt Barrows	52 50
W. H. Chapman	66 00
T. N. Cooper	944 00
A. M. Crane	2,657 39
S. R. Crumbaugh	25 00
A. H. Clark	1,510 36
D. S. Crowder	7 00
H. M. Cooper	80 00
Gustave Clemen	385 45
I. H. Duval	349 50
Geo. Drury	198 00
E. V. Donelson	87 36
Joseph Fehr	20 00
E. A. Freeman	50 00
Thos. J. Grimeson	1,098 32
A. M. Hughes, jr	428 00
C. B. Harrison	300 60
J. H. Hale	169 29
W. H. Johnson	1,240 00
Horace Kellogg	4,867 38
A. A. Knight	528 95
W. J. Landram	940 00
Jno. Lofland	184 60
Edward McLeer	934 75
J. B. McCoy	2,351 89
J. M. Melton	231 00
F. S. Nustadtl	2,071 75
Jasper Packard	1,117 69
Thos. Powers	1,451 92
Stanley Plummer	1,721 65
Jno. M. Raum	710 50
Jno. Rooney	242 45
J. B. Raulston	212 00
Wm. Somerville	338 16
Jas. G. P. Sumner and Wm. M. Bachelor	372 51
J. G. P. Sumner	241 60
L. A. Thrasher	1,202 96
Jacob Wagner	1,046 16
L. D. Waddel	223 72
G. W. Wilson	2,788 90
Jacob F. Walther	17 50
Isaac J. Young	117 00
	43,692 11
Allowance or drawback:	
To Anheuser-Busch Brewing Association	3,067 69
J. H. Allen	58 32
G. Amsinck & Co	129 60
J. H. Butts	1,003 20
Ralph Brandreth	832 52
Phillip Best Brewing Company	2,197 39
Barclay & Co	795 29
Franklin Brandreth	139 97
Edson Bradley, jr	1,673 10
Jno. H. Boden & Co	259 20
W. A. Bachelor	28 29
Bunderford & Jenney	57 03
L. Brandies & Co	308 45
V. Basanta	23 33
L. Cunningham	36 90
S. D. Coulbourn, jr	30 60
W. H. Crossman & Bro	384 06
Coombs, Crosby & Eddy	315 96
A. Crawford	42 35
Chas. N. Crittenton	73 48
Carried forward	11,456 73

1884-'84. INTERNAL REVENUE—PUBLIC DEBT.

Allowance or drawback—Continued.	
Brought forward	$11,456 73
To Jos. Cristadoro	27 36
T. G. Challeman & Co	6 84
Herman Calvi	77 44
C. M. Crittenton	22 03
Henry Dalley, jr	32 40
P. H. Drake & Co	45 36
G. De Cordova	56 81
Louis Deutsch	774 45
A. Dougherty, jr	38 88
A. B. De Grath	82 08
Emile Das Marets & Co	47 88
J. J. Depperman	55 20
Mendel Esberg	4,897 18
W. R. Grace & Co	43 20
A. Gunther & Co	984 28
G. G. Green	156 02
G. W. Gail & Ax	172 84
Lewis Goodman	334 43
Grant & DeGrath	13 68
Frederick Hollender	366 27
Theo. Hermann	264 97
G. W. Holman, jr	47 67
Herbst Bros	27 00
H. G. Hellman	173 70
S. Hermann	32 60
Salon Hancock & Co	289 44
H. S. Henry & Son	13 68
J. Harby Moses & Co	12 96
Hostetter & Smith	979 34
W. H. Harrison	21 89
Wm. B. Hooper	70 20
Hogarty Bros. & Co	10 94
Harralson & Co	960 00
L. Hernsheim & Bro	21 00
S. Hernsheim & Bro	39 96
Dr. D. Jayne & Son	2,725 94
J. H. Jennings	83 70
G. G. Kennedy	308 88
Kane & Behrens	498 81
Kidder & Laird	285 80
Kobes Bros	35 15
Knoeppel & Co	12 96
F. C. Liebe	36 00
I. Landsberger	655 20
Lehn & Fink	107 62
Lanman & Kemp	6,771 89
Langley & Michaels	80 64
A. S. Lazarus & Co	168 78
W. J. Lemp	70 30
Lilienthal & Co	2,593 80
Walter Leaman	33 44
P. Lorillard & Co	136 00
Lee Low	32 00
Joseph May	66 60
Simon Mayers	274 50
P. McClure	172 80
Mosbacher & Co	274 48
C. McCulloch, Beecher & Co	145 92
McCoy & Sanders	334 39
J. H. Moses & Co	25 92
José McMenendez & Co	145 80
Merchants' Gargling Oil Company	13 83
M. E. McDowell	3,047 62
A. Merle	36 90
R. H. McDonald & Co	10 37
Jas. R. McAlpine	129 60
Maicas & Co	159 58
New York Consolidated Card Company	116 64
Carried forward	42,248 57

Allowance or drawback—Continued.	
Brought forward	$42,248 57
To C. W. Nieder	49 25
L. H. Neudecker	16 00
Geo. Oulton	79 20
R. M. Ohmeis & Co	36 08
H. Planton & Son	27 36
L. Pockwitz	36 00
Jno. Penet	28 80
Phœnix Bottling Company	165 58
Radway & Co	469 22
Redington & Co	557 99
F. Alfred Reichardt	31 11
J. E. Schwartz & Co	212 54
Joseph Schlitz Brewing Company	874 13
Conrad Seipp Brewing Company	204 56
F. & M. Schaefer Brewing Company	1,443 72
Chas. Seitz	31 68
Geo. S. Scott	32 40
A. D. Strause & Co	180 00
S. Samper & Co	293 68
E. F. Schroder	160 00
J. M. Smith	56 23
Henry Schroder	70 20
A. Seemuller & Sons	166 96
Jno. Saulnier & Co	36 00
Torchiani & Kreemer	702 09
Herman Tappan	87 72
Jno. L. Thompson, Son & Co	38 88
L. Toplitz & Co	10 80
I. R. Taylor	21 89
E. H. Truex	11 83
Vaechting Shape & Co	650 28
S. Van Duzer	194 40
Carl Von Dabenberg & Co	117 90
Wm. Wolff	387 90
A. H. Whiting	13 68
Aug. Wolters	115 20
Emanuel Wertheimer	608 56
H. H. Warner & Co	32 40
Jno. B. Woodward	164 16
Jas. D. Warner	332 53
L. W. Warner & Co	25 92
Edwin Walters & Co	31 50
Wm. Wirtz	10 64
James Wainwright	36 90
Young, Ludd & Coffin	147 20
	51,249 04
Relief of B. F. Lonergan:	
To B. F. Lonergan	615 61
Relief of Ernest F. Unland, act March 3, 1883:	
To Ernest F. Unland	796 71
Relief of Columbus F. Perry and Elizabeth H. Gilmer:	
To Columbus F. Perry and Elizabeth H. Gilmer	3,000 00
Relief of E. S. Montell, executrix, act March, 1883:	
To estate of James E. Montell, deceased	835 20
Relief of Charles Kortzenborn, act March 3, 1883:	
To Charles Kortzenborn	125 00

PUBLIC DEBT.

Redemption, gold certificates, act March 3, 1863:	
To A. U. Wyman	$888,840 00
Redemption, gold certificates, act July 12, 1882:	
To A. U. Wyman	$24,567,140 00

Redemption, silver certificates: To A. U. Wyman	$20,005,140 00
Redemption, certificates of deposit, act June 8, 1872: To A. U. Wyman	27,845,000 00
Redemption, refunding certificates, act February 26, 1879: To A. U. Wyman	65,900 00
Redemption, seven-thirties of 1861: To A. U. Wyman	400 00
Redemption, old demand notes: To A. U. Wyman	545 00
Redemption, legal-tender notes: To A. U. Wyman	85,948,236 00
Redemption, fractional currency: To A. U. Wyman	20,629 50
Redemption, one-year notes of 1863: To A. U. Wyman	1,200 00
Redemption, two-year notes of 1863: To A. U. Wyman	800 00
Redemption, compound-interest notes: To A. U. Wyman	5,960 00
Redemption, seven-thirties of 1864 and 1865: To A. U. Wyman	3,350 00
Redemption, loan of February 1861, (1881's): To A. U. Wyman	55,000 00
Redemption, Oregon war debt: To A. U. Wyman	650 00
Redemption, loan of 1858: To A. U. Wyman	5,000 00
Redemption, loan of July and August, 1861 (1881's): To A. U. Wyman	202,650 00
Redemption, loan of July and August, 1861 (1881's), continued at 3½ per cent.: To A. U. Wyman	566,250 00
Redemption, five-twenties of 1862: To A. U. Wyman	4,350 00
Redemption, loan of 1863 (1881's): To A. U. Wyman	28,700 00
Redemption, loan of 1863 (1881's), continued at 3½ per cent.: To A. U. Wyman	422,550 00
Redemption, ten-forties of 1864: To A. U. Wyman	72,300 00
Redemption, five-twenties of June, 1864: To A. U. Wyman	1,000 00
Redemption, five-twenties of 1865: To A. U. Wyman	1,200 00
Redemption, consols of 1865: To A. U. Wyman	65.400 00
Redemption, consols of 1867: To A. U. Wyman	178,850 00
Redemption, consols of 1868: To A. U. Wyman	21,700 00
Redemption, funded loan of 1881: To A. U. Wyman	$176,650 00
Redemption, funded loan of 1881, continued at 3½ per cent.: To A. U. Wyman	34,550,700 00
Redemption, loan of 1882, 3 per cent., act of July 12, 1882: To A. U. Wyman	64,814 600 00
Interest, refunding certificates, act February, 26, 1879: To A. U. Wyman	12,250 21
Interest, Navy pension fund: To Secretary Navy, trustee	630,000 00
Interest, seven-thirties of 1861: To A. U. Wyman	72 06
Interest, one-year notes of 1863: To A. U. Wyman	60 00
Interest, two-year notes of 1863: To A. U. Wyman	77 92
Interest, compound-interest notes: To A. U. Wyman	1,156 24
Interest, seven-thirties of 1864 and 1865: To A. U. Wyman	545 15
Interest, loan of 1858: To A. U. Wyman	2,750 00
Interest, loan of February, 1861 (1881's): To A. U. Wyman	1,860 00
Interest, Oregon war debt: To A. U. Wyman	48 00
Deduct from repayment: By A. U. Wyman	345 00
Excess of repayment	297 00
Interest, loan of July and August, 1861, 1881's): To A. U. Wyman	15,616 50
Interest, loan of July and August, 1861 (1881's), continued at 3½ per cent.: To A. U. Wyman	8,372 73
Interest, five-twenties of 1862: To A. U. Wyman	847 25
Deduct repayment: By A. U. Wyman	51 00
	796 25
Interest, loan of 1863, continued at 3½ per cent.: To A. U. Wyman	3,394 41
Interest, loan of 1863 (1881): To A. U. Wyman	4,659 00
Interest, ten-forties of 1864: To A. U. Wyman	6,925 97
Deduct repayment: By A. U. Wyman	117 50
	6,808 47
Interest, five-twenties of June, 1864: To A. U. Wyman	6 97
Interest, five-twenties of 1865: To A. U. Wyman	2,893 94

1883–'84. PUBLIC DEBT—INTERIOR—INDIANS.

Interest, consols of 1865		
To A. U. Wyman		$12,665 36
Deduct repayment:		
By A. U. Wyman		64 50
		12,600 86
Interest, consols of 1867:		
To A. U. Wyman		22,539 63
Deduct repayment:		
By A. U. Wyman		45 00
		22,494 63
Interest, consols of 1868:		
To A. U. Wyman		579 20
Interest, Central Pacific stock:		
To A. U. Wyman		1,552,327 20
Interest, Kansas Pacific stock (U. P. E. D.)		378,150 00
Interest, Union Pacific stock:		
To A. U. Wyman		1,631,490 72
Interest, Central Branch Union Pacific stock, A. and P. P.:		
To A. U. Wyman		95,640 00
Interest, Western Pacific stock:		
To A. U. Wyman		118,233 60
Interest, Sioux City and Pacific stock:		
To A. U. Wyman		97,639 20
Interest, funded loan of 1881:		
To A. U. Wyman		$9,444 10
Interest, funded loan of 1881 continued at 3½ per cent.:		
To A. U. Wyman		570,149 27
Interest, funded loan of 1891:		
To A. U. Wyman		11,196,344 22
Deduct repayments:		
By J. Gilfillan	$63 24	
A. U. Wyman	11 25	
		74 49
		11,196,269 73
Interest, funded loan of 1907:		
To A. U. Wyman		29,522,536 00
Deduct repayments:		
By J. Gilfillan	$2,480 50	
A. U. Wyman	1,680 19	
		4,160 69
		29,518,375 31
Interest, loan of 1882, 3 per cents, act July 12, 1882:		
To A. U. Wyman		8,686,024 81
Deduct repayments:		
By J. Gilfillan	$750 00	
A. U. Wyman	1,313 00	
		2,063 00
		8,683,961 81

INTERIOR—INDIANS.

Pay of Indian agents, 1884:		
To H. J. Armstrong		$2,000 00
D. P. Andrews		1,500 00
C. G. Belknap		500 00
P. Buckley		956 52
E. P. Allen		1,200 00
R. A. Allen		450 00
R. G. Cosler		600 00
J. V. Carter		600 00
J. W. Clark		1,500 00
A. L. Cook		1,500 00
J. W. Cramsie		1,200 00
E. W. Davis		1,414 36
R. W. Durfee		2,000 00
G. L. Davenport		1,000 00
D. B. Dyer		1,675 00
J. G. Gasmann		1,800 00
S. B. Gibson		800 00
J. F. Gardner		937 50
A. Gessner		332 41
A. J. Gifford		251 40
J. Harris		1,100 00
P. B. Hunt		2,000 00
J. Irwin		750 00
A. H. Jackson		1,800 00
J. Kaufman		1,125 00
I. Lightner		1,200 00
W. L. Lincoln		1,000 00
W. H. H. Lewellyn		1,500 00
H. C. Linn		1,000 00
C. P. Luse		1,600 00
S. S. Lawson		325 00
J. M. McMasters		1,800 00
R. H. Milroy		2,000 00
J. F. Minnis		375 00
V. T. McGillycuddy		2,200 00
C. E. Monteith		1,600 00
C. S. Mayhugh		1,800 00
J. McLaughlin		1,700 00
L. J. Miles		1,600 00
Carried forward		48,692 19
Pay of Indian agents, 1884—Continued.		
Brought forward		$48,692 19
To J. D. Miles		550 00
J. G. McCallum		975 00
S. R. Martin		548 03
L. M. Nickerson		1,100 00
W. Patten		1,400 00
W. Peacock		171 43
D. M. Riordan		1,500 00
W. M. Ridpath		1,600 00
P. Ronan		1,500 00
P. B. Sinnott		750 00
P. Sanchez		2,000 00
S. E. Snider		1,929 35
J. A. Simmes		375 00
E. J. Sommerville		1,200 00
H. B. Sheldon		1,500 00
J. Smith		500 00
W. A. Swan		1,500 00
J. W. Scott		750 00
J. O. Tufts		1,646 70
B. W. Thompson		1,247 28
I. A. Taylor		300 00
P. P. Wilcox		2,000 00
F. M. Wadsworth		1,200 00
J. G. Wright		2,200 00
G. W. Wilkinson		1,600 00
O. Word		1,125 00
S. D. Waters		1,031 25
C. Willoughby		562 50
J. Young		900 00
		82,353 73
Deduct repayments:		
By B. G. Castor	$300 00	
J. Q. Tufts	73 37	
O. Word	246 23	
		619 60
		81,734 13

Pay of Indian agents, 1883:		
To J. Biggs		$375 00
G. L. Davenport		250 00
G. Eastman		500 00
J. G. Gasmann		113 74
J. Irwin		375 00
A. H. Jackson		34 24
L. Love		338 40
J. A. Simms		750 00
		2,736 38
Deduct repayments:		
By G. L. Davenport	$250 00	
Interior Department	243 70	
		493 70
		2,242 68
Pay of Indian agents, 1882:		
To A. Edwards		400 00
J. Irwin		4 12
Interior Department		231 60
H. Page		346 20
E. A. Stone		467 84
G. H. Spencer		131 98
C. Willoughby		275 00
		1,856 74
Pay of Indian agents, 1881 and prior years (transfer account):		
To A. G. Boone		6 52
L. H. Carpenter		48 91
J. Crawford		200 00
W. H. Garrett		703 19
Interior Department		2,957 13
C. H. Searing		92 15
J. S. Short		3 25
J. C. Smith		213 66
		4,224 81
Deduct repayments:		
By Interior Department	$1,356 32	
I. Lightner	131 77	
		1,488 09
		2,736 72
Pay of Indian agents, 1879 and prior years:		
To J. Vose		176 49
Pay of Indian agents, 1881 and prior years:		
By J. L. Broaddus	$4 12	
H. Gregory	41 75	
W. R. Mateer	28 63	
R. H. Milroy	1 42	
V. T. McGillycuddy	36 66	
B. C. Whiting	600 00	
J. Wright	400 00	
		1,112 58
Pay of Indian police, 1884:		
To H. O. Armour		471 75
H. J. Armstrong		456 00
D. P. Andrews		827 00
R. A. Allen		816 00
P. Buckley		676 00
A. Barclay		216 00
J. W. Clark		396 00
A. L. Cook		430 45
J. W. Cramsie		972 00
R. A. Dorman		46 00
E. W. Davis		456 00
D. B. Dyer		1,910 99
W. W. Dodge		63 02
E. Ells		972 00
J. G. Gasmann		1,728 59
A. Gesner		318 00
A. J. Gifford		168 00
P. Hunt		2,098 40
Carried forward		13,220 20

Pay of Indian police, 1884—Cont'd.		
Brought forward		$13,022 20
To J. Irwin		135 00
A. H. Jackson		636 00
J. Kauffman		495 00
I. Lightner		816 00
W. H. H. Lewellyn		2,010 00
C. P. Luse		2,917 37
W. L. Lincoln		972 00
Lamberson, Furman & Co.		262 04
J. M. McMaster		1,145 00
R. H. Milroy		724 00
P. C. Meehan		25 25
J. D. Miles		1,212 00
V. T. McGillycuddy		3,108 00
J. S. Mayhugh		456 00
J. M. McLaughlin		1,752 00
L. J. Miles		1,262 06
C. E. Montieth		396 00
S. R. Martin		180 00
E. Naumburg		9,690 62
L. M. Nickerson		907 00
North River Sugar Refining Company		122 71
G. F. Penfield		6 36
W. Patten		1,272 00
W. M. Ridpath		987 83
S. E. Snider		1,572 00
E. J. Sommerville		666 00
J. Smith		318 00
W. A. Swan		1,270 33
State Line Milling Company, Oregon		72 00
J. W. Scott		2,070 00
J. Q. Tufts		3,657 75
C. H. Tenney		617 74
B. W. Thompson		387 00
F. M. Wadsworth		750 81
S. E. Worden		690 00
J. G. Wright		1,608 00
W. J. Wiley		5 84
G. W. Wilkinson		912 00
O. Wood		645 00
C. Willoughby		240 00
J. Young		876 00
		60,870 91
Deduct repayments:		
By P. Buckley	$55 00	
D. B. Dyer	14 52	
E. Ells	9 04	
J. W. Scott	25 36	
B. W. Thompsom	21 50	
J. Q. Tufts	92 00	
O. Wood	129 00	
J. Young	90 00	
		436 42
		60,434 49
Pay of Indian police, 1883:		
To J. W. F. Dorman		270 40
H. W. Duncan		56 92
J. G. Gasmann		453 00
J. C. Naylor		9 75
E. Naumburg		600 42
C. P. Luse		11 48
Interior Department		243 70
E. Remington & Sons		2,996 50
		4,642 17
Deduct repayments:		
By G. P. Andrews	$17 72	
H. J. Armstrong	39 00	
A. L. Cook	6 50	
J. W. Clark	66 67	
J. J. Critchlow	2 50	
D. B. Dyer	10 00	
J. G. Gasmann	15 33	
A. H. Jackson	5 67	
C. P. Luse	120 48	
J. M. McMaster	33 45	
R. H. Milroy	30 00	
Carried forward	347 32	4,642 17

Pay of Indian police, 1883—Cont'd.		
Brought forward	$347 32	$4,642 17
Deduct repayments:		
By L. M. Nickerson	25 67	
N. S. Porter	152 00	
W. H. Parkhurst	9 50	
E. Stephens	81 35	
W. A. Swan	2 17	
J. Q. Tufts	206 50	
R. G. Wheeler	102 00	
O. Wood	12 90	
J. G. Wright	2 50	
J. Young	35 00	
		976 91
		3,665 26
Pay of Indian police, 1881 and prior years (transfer account):		
To J. Biggs, deceased		02
Deduct from repayments:		
By C. Crissey	$456 40	
Interior Department	121 79	
H. Page	51	
		578 70
Excess of repayments		578 68
Pay of Indian police, 1881 and prior years:		
By J. Miles	$68 00	
Pay of interpreters, 1884:		
To D. P. Andrews		246 19
H. J. Armstrong		400 00
E. P. Allen		100 00
R. A. Allen		150 00
C. Beede		60 00
J. V. Carter		150 00
J. W. Clark		300 00
A. L. Cook		300 00
J. W. Cramsie		300 00
E. W. Davis		300 00
W. R. Durfee		260 08
D. B. Dyer		375 00
W. S. Dyer		40 00
E. Ells		300 00
J. G. Gasmann		525 00
J. F. Gardner		225 00
A. Gesner		150 00
A. J. Gifford		75 00
J. Harris		300 00
P. B. Hunt		600 00
J. Irwin		225 00
A. H. Jackson		300 00
J. Kauffman		225 00
I. Lightner		450 00
W. L. Lincoln		300 00
W. H. H. Lewellyn		350 00
H. C. Linn		487 50
C. P. Luse		900 00
J. M. McMaster		450 00
R. H. Milroy		300 00
J. F. Minniss		75 00
J. D. Miles		450 00
V. T. McGillycuddy		900 00
C. E. Monteith		300 00
J. S. Mayhugh		262 50
J. McLaughlin		300 00
L. J. Miles		300 00
S. R. Martin		225 00
L. M. Nickerson		600 00
W. Patten		325 00
D. M. Riorden		225 00
W. M. Ridpath		300 00
P. Roman		300 00
W. T. Russell		17 50
P. Sanchez		700 00
S. E. Snider		600 00
E. J. Sommerville		300 00
J. Smith		150 00
W. A. Swan		300 00
J. W. Scott		775 00
Carried forward		16,548 77

Pay of interpreters, 1884—Cont'd.		
Brought forward		$16,548 77
To E. B. Townsend		21 00
B. W. Thompson		400 00
I. A. Taylor		150 00
P. P. Wilcox		500 00
F. M. Wadsworth		300 00
L. E. Woodin		225 00
J. G. Wright		400 00
G. W. Wilkinson		300 00
O. Wood		375 00
S. D. Waters		261 25
J. Young		150 00
		19,631 02
Deduct repayments:		
By J. M. McMasters	$67 58	
O. Wood	75 00	
S. D. Waters	56 25	
J. Young	2 45	
		201 28
		19,429 74
Pay of interpreters, 1883:		
To J. G. Gassmann		150 00
G. L. Davenport		50 00
E. Larimer		102 00
Louis		119 87
W. Patten		72 00
P. Sanchez		175 55
S. E. Snider		150 00
J. A. Wright		4 50
		823 92
Deduct repayments:		
By A. L. Cook	$50 28	
E. Ells	224 17	
J. Harries	75 00	
A. H. Jackson	1	
W. H. Parkhurst	2	
J. A. Simmes	31 79	
R. G. Wheeler	75 00	
J. Young	31 32	
		487 59
		336 33
Pay of interpreters, 1882 (transfer account):		
By H. Page	$73 56	
Pay of interpreters, 1882:		
To C. H. Howard		1 00
Deduct from repayments:		
By J. H. Fleming	$75 00	
H. Page	46 44	
		121 44
Excess of repayments		120 44
Pay of interpreters, 1881 and prior years:		
By L. H. Carpenter	$100 00	
L. M. Nickerson	27	
J. M. Shaw	41 20	
		141 47
Pay of interpreters, 1881 and prior years (transfer account):		
To Interior Department		2,009 16
Deduct repayments:		
By J. Crawford	$200 00	
W. H. Garrett	74 42	
Interior Department	132 59	
M. H. Newlan	100 37	
H. Page	15 10	
		522 48
		1,486 68

Pay of Indian inspectors, 1884:
To M. R. Barr $3,241 80
S. S. Benedict 3,000 00
R. S. Gardner 3,000 00
C. H. Howard 2,250 00
H. Ward 3,000 00
14,491 80
Deduct repayment:
By M. R. Barr 494 50
13,997 30

Traveling expenses of Indian inspectors, 1884:
To Atchison, Topeka and Santa Fé R. R. 30 84
Atlantic and Pacific R. R. 27 80
M. R. Barr 1,300 00
S. S. Benedict 1,150 00
Chicago, Milwaukee and Saint Paul R. R. 4 60
Denver and Rio Grande R. R. 43 35
R. S. Gardner 1,140 00
C. H. Howard 750 00
Missouri Pacific R. R. 15 05
Northern Pacific R. R. 125 75
Union Pacific R. R. 25 25
H. Ward 1,300 00
5,912 64
Deduct repayment:
By M. R. Barr 418 97
5,493 67

Traveling expenses of Indian inspectors 1883:
To Atchison, Topeka and Santa Fé R. R 60 35
Chicago, Rock Island and Pacific R. R 14 80
Central Pacific R. R 220 95
Colorado Steam Navigation .. 52 50
Denver and Rio Grande R. R .. 39 30
387 90
Deduct from repayments:
By S. S. Benedict $251 55
R. S. Gardner 102 25
C. H. Howard 320 00
W. J. Pollock 4 68
H. Ward 39 60
718 08
Excess of repayment 330 18

Traveling expenses of Indian inspectors 1882:
To Missouri Pacific R. R 4 85
Saint Paul, Minneapolis and Manitoba R. R 16 30
21 15
Deduct from repayments:
By C. H. Howard $54 46
W. J. Pollock 60
55 06
Excess of repayments 33 91

Pay of Indian school superintendent, 1884:
To J. M. Haworth 3,000 00

Traveling expenses of Indian school superintendent, 1884:
To Atchison, Topeka and Santa Fé R. R 58 50
J. M. Haworth 1,250 00
1,408 50

Traveling expenses of Indian school inspector, 1883:
To Atchison, Topeka and Santa Fé R. R $16 50
J. M. Haworth 11 12
27 62

Traveling expenses of Indian inspectors, 1881 and prior (transfer account):
By Interior Department $0 68

Buildings at agencies, and repairs, 1884:
To E. P. Allen 300 00
D. P. Andrews 688 75
P. Buckley 50 00
B. G. Cosler 12 50
J. W. Cramsie 442 50
A. L. Cook 75 00
B. F. Congdon 12 50
Candalaris 9 00
W. R. Durfee 607 50
D. B. Dyer 550 83
J. G. Gasmann 20 00
Harries 762 50
P. B. Hunt 3,300 00
J. A. Kelting 15 00
I. Lightner 1,000 00
W. H. H. Lewellyn 400 00
J. S. Mayhugh 1,064 50
J. G. McCallom 249 00
L. J. Miles 389 33
S. R. Martin 500 00
W. Patton 75 00
W. Peacock 5 71
D. M. Riorden 2,373 65
W. M. Ridpath 50 00
P. Sanchez 600 00
J. A. Simmes 45 00
W. A. Swan 1,278 55
S E. Snider 2,133 00
J. W. Scott 197 55
J. Q. Tufts 59 30
I. A. Taylor 500 00
J. G. Wright 827 83
G. W. Wilkinson 992 70
S. D. Waters 290 00
19,877 20
Deduct repayments:
By B. G. Casler $6 25
D. B. Dyer 42 69
J. A. Simmes 45 00
S. D. Waters 1 25
95 19
19,782 01

Buildings at agencies, and repairs, 1883:
To C. G. Belknap 40 00
M. Greyson 3,666 66
3,706 66
Deduct repayments:
By E. P. Allen $25 00
J. V. Carter 87 91
W. R. Durfee 73 60
J. H. Fleming 276 93
J. Harries 35 93
W. H. H. Lewellyn . 1 61
C. P. Luse 190 75
J. M. McMaster 800 00
J. McLaughlin 40 50
N. S. Porter 3 15
D. M. Riorden 274 67
E. Stephens 166 50
J. Q. Tufts 226 10
L. E. Woodin 75 56
G. W. Wilkinson ... 29 37
2,307 67
1,398 99

Buildings at agencies, and repairs, 1882:		
To Payne & Fernald		$194 48
Deduct repayment:		
By A. Edwards		194 48
Buildings at agencies, and repairs, 1881 and prior years (transportation account):		
To Interior Department		210 00
R. M. Pratt		315 30
		525 30
Deduct repayment:		
By Interior Department		59 70
		465 60
Contingencies Indian Department, 1884:		
To Adams Express Co		31 20
E. P. Allen		845 00
R. A. Allen		79 00
D. P. Andrews		727 35
H. J. Armstrong		60 00
Atchison, Topeka and Santa Fé R. R		119 20
C. Beede		3,940 00
J. A. Beckwith		70 00
C. C. Bohn		52 00
Baltimore and Ohio R. R		720 85
T. Butler		11 50
E. Chandler		475 00
B. G. Cosler		625 00
J. V. Carter		300 00
Carlisle Indian School		80 00
J. W. Clark		30 00
J. A. Covington		10 75
W. S. Dyer		2,776 50
D. B. Dyer		1,200 00
G. L. Davenport		100 00
W. R. Durfee		2,000 00
E. W. Davis		150 00
E. W. Denison		590 50
A. C. Fletcher		980 05
P. H. Folsom		1,590 69
J. G. Gasmann		515 93
S. B. Gibson		25 00
A. Gesner		450 00
J. F. Gardner		222 25
P. B. Hunt		1,400 00
W. F. Halcomb		1 00
W. F. Halleck		300 00
H. Halftown		75 00
A. H. Jackson		4 75
W. H. H. Lewellyn		200 00
I. Lightner		70 00
H. C. Linn		275 00
C. P. Luse		2,780 00
G. M. Lockwood		12 30
A. D. Lake		100 00
G. R. Milburn		3,350 00
J. D. Miles		700 00
C. E. Monteith		1,803 50
L. J. Miles		450 00
E. Morrison		25 00
W. V. Marmion		500 00
Northern Pacific R. R		17 20
O. Netsell		60 00
G. Peters		24 00
C. Porter		211 70
N. Peters		400 00
W. Patten		100 00
W. Peacock		119 22
P. Roman		578 20
D. M. Riordan		150 00
R. A. Robbins		9 00
W. H. Robb		733 55
W. H. Schieffelin		121 64
J. W. Scott		250 00
S. E. Snider		40 00
E. B. Townsend		2,150 00
G. F. Timms & Co		17 15
Carried forward		35,805 98

Contingencies Indian Department, 1884—Continued.		
Brought forward		$35,805 98
To J. Q. Tufts		3,195 79
I. A. Taylor		150 00
J. A. Wright		1,068 50
L. E. Woodin		125 00
G. W. Wilkinson		25 00
P. P. Wilcox		600 00
A. C. Woodmancy		5 00
		40,975 27
Deduct repayments:		
By J. A. Beckwith	$2 75	
B. G. Cosler	200 29	
J. V. Carter	244 39	
D. B. Dyer	218 16	
F. H. Folsom	2 30	
J. W. Scott	102 70	
J. B. Tufts	101 62	
L. E. Woodin	36 30	
J. A. Wright	57 00	
		965 51
		40,009 76
Contingencies Indian Department, 1883:		
To Adams Express Company		3 95
Atchison, Topeka and Santa Fé R. R		24 00
Baltimore and Ohio R. R		11 75
J. Biggs		27 30
Central Pacific R. R		165 49
Central Branch Union Pacific R. R		1 50
G. L. Davenport		21 00
W. E. Day		1,207 00
G. Eastman		100 77
J. G. Gasmann		150 00
S. B. Gibson		5 00
R. T. Hunter		400 00
J. H. Hilliard & Co		145 00
Interior Department		22 35
Mrs. Helen Jackson		1,250 00
T. J. Jordan		57 50
L. Lasarge		80 00
L. Lutz		32 25
Missouri Pacific R. R		45 90
Northern Pacific R.R		79 35
O. Netsell		90 00
C. Porter		30 50
W. V. Rinehart		105 25
Selah		36 00
J. A. Thompson		119 35
G. F. Timms & Co		182 85
B. M. Thomas		11 40
Union Pacific R. R		72 05
J. A. Wright		156 09
		4,633 60
Deduct repayments:		
By D. P. Andrews	$229 36	
E. P. Allen	50 44	
C. Beede	57 99	
E. Chandler	3 00	
C. Crissey, in part	49 14	
B. G. Cosler	62 27	
J. V. Carter	32 89	
G. L. Davenport	38 25	
W. R. Durfee	438 46	
D. B. Dyer	108 85	
J. H. Fleming	89 50	
P. B. Hunt	60 00	
Interior Department	48 06	
C. P. Luse	215 18	
I. Lightner	36 90	
H. C. Linn	28 75	
G. R. Milburn	107 74	
J. D. Miles	75 00	
L. J. Miles, in part	75 34	
J. M. McMaster	190 00	
D. M. Riorden	669 90	
Carried forward	2,667 02	4,633 60

Contingencies, Indian Department, 1883--Continued.		
Deduct repayments:		
Brought forward.	$2,667 02	$4,633 60
By E. Stephens	25 35	
P. Sanchez	86 44	
J. Q. Tufts	37 57	
E. B. Towsend	232 56	
J. A. Wright	5 65	
G. W. Wilkinson	30 25	
L. E. Woodin	169 57	
		3,254 41
		1,379 19
Contingencies, Indian Department, 1882:		
To J. Biggs, deceased		22 50
G. L. Davenport		40
A. Edwards		15 56
Interior Department		42 52
S. E. Mahan		50 55
H. Page		40 33
		171 86
Deduct repayments:		
By W. D. E. Andrus	$46 89	
D. B. Dyer	1 05	
G. Eastman	22 50	
Interior Department	65 40	
J. M. McMaster	9 00	
L. J. Miles	50	
		145 34
		26 52
Contingencies, Indian Department, 1881 and prior years (transfer account):		
To W. D. E. Andrus		78 30
C. Crissey		211 81
L. H. Carpenter		178 50
G. Eastman		340 58
P. B. Hunt		49 72
E. Hoag		775 47
Interior Department		477 41
E. Mahan		18 00
M. H. Newlin		133 10
H. Page		356 33
J. C. Smith		49 61
B. M. Thomas		119 30
C. Willoughby		37 87
		2,826 00
Deduct repayments:		
By A. Edwards	$77 80	
Interior Department	423 72	
R. M. Pratt	1 13	
		502 65
		2,323 35
Contingencies, Indian Department, 1879 and prior years:		
To T. S. Free		3 77
Contingencies, Indian Department, 1880:		
To J. B. Jackson		6 00
S. S. Lawson		2 50
		8 50
Contingencies, Indian Department, 1881 and prior years:		
By P. A. Boone	$5 33	
A. Edwards	118 23	
R. S. Gardner	12 24	
I. T. Gibson	1 00	
F. A. Hawkins	5 92	
J. B. Jackson	25 05	
V. T. McGillycuddy	7 20	
L. J. Miles	2 38	
Carried forward..	177 35	

Contingencies, Indian Department, 1881 and prior years—Continued.		
Brought forward.	$177 35	
By J. M. Troth	135 39	
J. H. Wilbur	7 35	
		320 09
Expenses of Indian Commissioners, 1884:		
To E. Whittlesey		$2,000 00
Expenses of Indian Commissioners, 1883:		
To Chicago and Northwestern R. R		9 15
Milwaukee and Saint Paul R. R		16 80
		25 95
Deduct from repayment:		
By E. Whittlesey		439 10
Excess of repayment		413 15
Telegraphing and purchase of Indian supplies, 1884:		
To Albon Man		3,000 00
American Rapid Telegraph Company		90
Advertiser, Trinidad, Colo		9 90
Arkansas City Traveler		9 80
Albuquerque Daily Journal		45 75
Arizona Daily Star		56 00
P. Ayros		90 00
Blackfoot Register		10 50
J. A. Beckwith		1,000 00
R. V. Bett		91 05
Baltimore and Ohio R. R		1 06
Baltimore and Ohio Telegraph Company		15 55
Bankers and Merchants' Telegraph Company		90
Bismarck Weekly Tribune, Dakota		30 60
J. Barnum		50 00
P. C. Barnum		360 00
Commercial Bulletin		266 55
Chicago Daily Tribune		368 64
Cornwell Bros. & Co		140 25
Carlisle Herald		12 30
E. L. Cooper		1,396 91
Commercial Advertiser		476 00
R. B. Courier		260 00
A. Cornell		160 00
J. W. Chapman		10 00
Denver Tribune, Colorado		420 50
Denver Times, Colorado		57 00
Daily Alta California		44 57
Daily Inter Ocean		261 53
Daily Oregonian		16 80
Daily Omaha Republican		25 50
Pioneer Press, Saint Paul, Minn		458 14
Arizona Journal		57 00
Arizona Citizen		82 25
Enterprise, Genoa, Nebr		10 00
Evening Bulletin, Colorado		58 77
W. Elliot		300 00
A. Foremen		50 00
Gazette, Las Vegas, N. Mex		11 25
T. D. Garrelty		30 20
Helena Daily Herald, Montana		74 00
F. T. Hawley		420 00
Helena Weekly Herald		24 00
J. J. Horgan		130 00
H. D. Harover		130 00
Journal, Lawrence, Kans		80 14
J. M. Jackson, agent		1,500 00
M. H. Kellam		720 00
M. B. Kellogg		837 72
Kansas City Daily Journal		342 50
Carried forward		14,004 53

Telegraphing and purchase of Indian supplies, 1884—Continued.		
Brought forward		$14,004 53
To G. M. Lockwood		21 45
C. P. Luse		4 25
F. Leinkauf		820 00
Leavenworth Times, Kansas.		40 50
Lincoln County Leader, New Mexico		7 05
J. Lewis		13 00
J. McCulloch		10 00
D. A. Magee		692 25
C. W. Mason		55 55
A. S. McNutt		25 00
W. A. Mann		26 20
E. Moale		100 00
New York Evening Post		27 60
W. S. North		171 25
Nonpareil, Council Bluffs, Iowa		100 50
New Mexican Review, Santa Fé, N. Mex		147 00
J. M. Osborn		432 55
Pennsylvania R. R		79 00
Press and Dakotean, Yankton, Dak		19 35
W. M. Rockwell		220 00
Rio Grande Republican		20 00
G. W. H. Stouch		250 00
C. B. Stone		352 61
H. W. Stevens		1,600 00
Sioux City Daily Journal		98 00
Salt Lake Tribune		85 24
Salt Lake City Herald		29 65
South Kansas Tribune-Independent		27 00
A. J. Sparks		98 00
Saint Louis Globe-Democrat.		631 40
The Pioneer		30 95
E. Taylor		479 55
E. D. Thomas		20 00
Union Pacific R. R		54 00
Ukiah City Press, San Francisco, Cal		15 50
Valley Sentinel, Carlisle, Pa.		36 48
J. Wood		3,900 00
E. S. Woog		58 50
B. Wellman		100 00
Western Union Telegraph Co.		1,297 71
Witchita Eagle, Kansas		53 35
C. E. Yost		24 00
		26,279 00
Deduct repayments:		
By J. A. Beckwith	$105 57	
W. D. Monnet	1 25	
H. C. Slavens	60 00	
J. Wood	3 23	
		170 05
		26,108 95
Telegraphing and purchase of Indian supplies, 1883:		
To Albon Man		1,500 00
R. L. Albertson		140 00
Albuquerque Journal, New Mexico		10 50
Arkansas City Traveler		3 20
Avant Courier		14 35
Baltimore and Ohio Telegraph Company		5 00
F. B. Corby		13 62
Cheyenne Daily Sun		47 00
Chicago Tribune		256 96
Denver Times		83 56
Denver Tribune		127 20
Daily Inter-Ocean		102 82
Daily Alta, California		39 00
Enterprise, Geneva, Nebr.		10 00
J. G. Gasmenn		2 00
G. F. Hargis		62 15
Interior Department		2 85
Carried forward		2,420 21

Telegraphing and purchase of Indian supplies, 1883—Continued.		
Brought forward		$2,420 21
To J. Irwin		38
Journal, Lawrence, Kans		104 04
Kansas City Daily, Missouri.		114 75
M. B. Kellogg		290 85
Leavenworth Times		133 50
G. M. Lockwood		2 25
E. R. Livermore		10 00
A. C. Macomb		25 00
New Mexican Review, Santa Fé, N. Mex		5 25
Nonpareil, Council Bluffs, Iowa		40 00
Omaha Republican		43 87
Omaha Daily Republican		26 25
W. J. Pollock		2 68
Pueblo Daily Chieftain		16 50
Sioux City Journal		44 00
Saint Louis Globe-Democrat.		190 93
South Kansas Tribune-Independent		28 00
Saint Paul Pioneer Press		77 80
Trinidad Weekly Advertiser.		9 85
E. Taylor		711 55
Western Union Telegraph Company		680 94
Wichita Eagle, Kansas		64 00
J. A. Wright		1 15
		5,043 75
Deduct repayments:		
By D. B. Dyer	$0 90	
E. Moale	90	
J. Wood	128 84	
		130 64
		4,913 11
Telegraphing and purchase of Indian supplies, 1882:		
To D. B. Dyer		$0 55
J. J. Horgan		30 00
C. H. Howard		65
Interior Department		1 54
J. Irwin		2 42
E. R. Livermore		10 00
Saint Paul Pioneer Press		25 20
B. M. Thomas		11 16
Union Pacific Railroad		4 53
		86 05
Deduct repayments:		
By E. Moale	$80 25	
L. Love	1 00	
		81 25
		4 80
Telegraphing and purchase of Indian supplies, 1881 and prior years, transfer account:		
To W. D. E. Andrus		1 50
C. Cressey		3 14
Interior Department		68
J. H. Wilbur		1 27
C. Willoughby		5 65
		12 24
Deduct repayment:		
By Interior Department		1 25
		10 99
Telegraphing and purchase of Indian supplies, 1881 and prior years:		
By L. M. Nickerson	$3 85	
J. H. Wilbur	2 64	
		6 49

Transportation of Indian supplies, 1884:		
To H. J. Armstrond	$1,000 00	
P. Buckley	125 00	
Baltimore and Potomac Railroad	3 46	
B. G. Cosler	125 00	
J. V. Carter	2,400 00	
G. D. Comings	10,237 78	
S. W. Cramsie	2,900 00	
Chicago, Saint Paul, Minnesota and Omaha R. R	27 00	
E. Davis	3,000 00	
W. R. Durfee	3,500 00	
W. S. Dyer	500 00	
D. B. Dyer	2,757 79	
E. Ells	350 00	
D. M. Ferry & Co	58 20	
E. Fenton	6 13	
J. G. Gasmenn	1,000 00	
A. Gesner	150 00	
P. B. Hnnt	6,703 50	
J. Harries	500 00	
R. C. Haywood	17,301 84	
W. J. Hadley	500 00	
J. Irwin	3,000 00	
R. C. Kerrens	11,387 50	
H. C. Linn	100 00	
C. P. Luse	2,000 00	
G. R. Lockwood & Son	1 08	
J. D. Miles	6,600 00	
C. E. Monteith	525 00	
J. S. Mayhugh	2,000 00	
J. C. McVay	19,170 76	
K. C. Morehouse	15,723 93	
L. J. Miles	1,300 00	
G. R. Milburn	500 00	
R. H. Milroy	500 00	
J. G. McCallum	221 50	
J. Marvin	51 02	
S. R. Martin	1,000 00	
R. H. Pratt	150 00	
C. Popper	1,056 28	
T. C. Power	25,849 52	
R. A. Robbins	407 86	
H. C. Stevens	30,716 53	
P. Sanchez	75 00	
J. Smith	500 00	
S. E. Snider	500 00	
P. B. Sinnott	40 00	
C. B. Stone	30,621 68	
H. W. Stevens	200 00	
L. Spiegelberg	4,963 84	
J. W. Scott	950 00	
B. W. Thompson	450 00	
I. A. Taylor	2,000 00	
F. M. Wadsworth	500 00	
L. E. Woodin	1,350 00	
S. D. Waters	131 02	
J. Wood	1,300 00	
O. Wood	425 00	
N. W. Wells	6,964 00	
G. W. Wilkinson	450 00	
C. Willoughby	200 00	
		227,027 22
Deduct repayments:		
By P. Buckley	$54 55	
B. G. Cosler	18 61	
J. V. Carter	7 77	
E. Ells	204 80	
J. Irwin	87 16	
J. W. Scott	310 19	
B. W. Thompson	75 43	
J. H. Woodhouse	3 74	
J. Wood	128 50	
L. E. Woodin	584 99	
S. D. Waters	5 54	
O. Wood	199 78	
		1,681 06
		225,346 16

Transportation of Indian supplies, 1883:		
To H. C. Akin	$4,737 33	
Atchison, Topeka and Santa Fé R. R	5 48	
Baltimore and Potomac R. R.	4 00	
E. D. Coming	2,815 13	
Central Pacific R. R.	92 65	
G. L. Davenport	6 64	
J. G. Gasmenn	300 00	
R. C. Haywood	323 46	
Interior Department	3 35	
G. W. Knox	37 37	
J. W. Kountz	55 00	
J. G. C. Lee	246 67	
K. C. Morehouse	1,478 28	
Markley, Alling & Co	2 90	
Missouri Pacific R. R.	1 91	
T. C. Power	5,324 34	
Oregon Railway and Navigation Company	3 88	
Pennsylvania Star Union Line	2 66	
C. Poffer	125 00	
R. A. Robbins	23 20	
N. Raymond	48 23	
C. B. Stone	463 88	
J. Smith	26 00	
L. Speigielberg	98	
Union Pacific R. R.	2 71	
N. W. Wells	1,612 50	
N. E. Wyland	48 47	
		17,792 02
Deduct repayments:		
By H. J. Armstrong	$757 07	
C. Crissey	394 65	
J. W. Cramsie	257 49	
B. G. Cosler	64 63	
J. V. Carter	101 30	
W. R. Durfee	1,685 83	
E. Ells	95 42	
J. G. Gasmann	251 80	
J. Irwin	376 06	
C. P. Luse	14 48	
H. C. Linn	50 00	
I. Lightner	63 39	
J. D. Miles	301 83	
L. J. Miles	207 60	
C. E. Monteith	487 02	
J. S. Mayhugh	278 73	
L. M. Nickerson	50 00	
R. H. Pratt	89 40	
N. S. Porter	198 62	
J. A. Simms	56 46	
E. A. Swan	20 24	
P. Sanchez	75 00	
J. Smith	112 77	
B. M. Thomas	45 70	
O. Wood	16 12	
L. E. Woodin	27 66	
G. W. Wilkinson	28 45	
R. G. Wheeler	100 00	
		6,207 21
		11,584 81
Transportation of Indian supplies, 1882:		
To Atchison, Topeka and Santa Fé R. R	99	
J. J. Critchlow	505 69	
A. Edwards	284 25	
P. B. Hunt	403 75	
Interior Department	1 15	
T. J. Jordan	279 70	
Northern Pacific R. R	6 52	
T. C. Power	13,631 57	
N. E. Whyland	51 03	
Carried forward		15,164 65

Transportation of Indian supplies, 1882—Continued.		
Brought forward		$15,164 65
Deduct repayments:		
By C. Crissey	$48 81	
G. Eastman	2 25	
P. B. Hunt	2 75	
J. Irwin	4 12	
		57 93
		15,106 72
Transportation of Indian supplies, 1881:		
To T. C. Power		1,086 03
Union Pacific R. R		68 00
		1,154 03
Transportation of Indian supplies, 1881 and prior years:		
By L. H. Carpenter	$113 87	
P. B. Hunt	25 59	
L. J. Miles	33	
W. R. Mateer	19 66	
L. M. Nickerson	34	
	159 79	
Transportation of Indian supplies, 1881 and prior years (transfer account):		
To C. Crissey		32 04
L. H. Carpenter		113 87
A. Edwards		77 80
G. Eastman		89 05
E. H. C. Hooper		51 20
P. B. Hunt		3 76
Interior Department		1,702 80
J. Kaufman		2 60
R. H. Milroy		180 78
R. H. Pratt		17 54
B. M. Thomas		102 18
C. Willoughby		39 46
		2,413 08
Deduct repayments:		
By Interior Department	$17 50	
J. C. Smith	37 17	
		54 67
		2,358 41
Transportation of Indian supplies, 1880:		
To estate of J. McGarry, deceased		580 55
Milburn Wagon Co		220 00
C. D. Warner		22 70
		823 25
Transportation of Indian supplies, 1879 and prior years:		
To N. W. Wells		53 60
Vaccination of Indians, 1884:		
To H. A. Martin & Son		201 00
Vaccination of Indians, 1883:		
To R. Walsh		35 00
Fulfilling treaties with Apaches, Kiowas, and Comanches:		
To P. Montgomery		35,850 50
Deduct repayments:		
By P. B. Hunt	$451 25	
E. Hoag	775 47	
		1,226 72
		34,623 78
Fulfilling treaties with Arapahoes and Cheyennes of Upper Arkansas River:		
By E. Hoag	$622 28	
Fulfilling treaties with Cheyennes and Arapahoes:		
To P. Montgomery		$30,575 00
Mrs. Celia C. Short		1,000 00
Mrs. Sarah Shaw		1,000 00
		32,575 00
Fulfilling treaties with Chickasaws:		
To Chickasaw Nation		3,000 00
Fulfilling treaties with Chippewas, Bois Fort band:		
To H. O. Armour		1,400 00
A. Barclay		676 25
H. B. Claflin		185 69
C. H. Castle		69 00
S. Colgate		32 13
Carlisle Indian School		21 75
C. H. Conover		31 83
S. H. Crane		266 73
R. A. Darman		103 50
W. R. Durfee		7,179 50
J. Dobson		1,003 00
A. Flagler		35 11
G. T. Lane		17 00
R. Murray		14 92
E. Naumburg		165 00
G. Peters		2 25
R. A. Robbins		606 43
C. W. Spicer		126 48
H. H. Tobey		119 00
D. Tredway		4 20
H. C. Wells		39 60
H. Wallach		282 00
H. T. Wakeman		10
W. Whiteside		572 53
J. H. Woodhouse		78 54
		13,032 54
Deduct repayment:		
By W. R. Durfee		594 70
		12,437 84
Fulfilling treaties with Chippewas of the Mississippi:		
To C. P. Luse		23,168 00
Deduct repayment:		
By C. P. Luse		2,168 00
		21,000 00
Fulfilling treaties with Chippewas, Pillagers, and Lake Winnebagoshish bands:		
To H. O. Armour		200 00
G. M. Acklin		9 00
A. Barclay		635 70
H. B. Claflin		193 62
E. J. Chaffee		98 05
S. Colgate		5 51
C. H. Conover		2 19
Carlisle Indian School		24 00
J. Culbert		56 50
S. H. Crane		93 30
R. A. Dorman		23 00
J. Dobson		2,738 66
C. H. Deen		22 50
A. Flagler		9 02
D. M. Ferry & Co		23 15
J. Godhelp		50 25
B. Hansell		11 25
H. King		7 80
C. P. Luse		13,693 07
G. T. Lane		2 00
L. H. Maxfield		84 00
R. Murray		25 20
J. R. Michael		12 84
E. Naumburg		402 60
North River Sugar Refining Company		27 27
G. Peters		4 25
Carried forward		18,454 73

Fulfilling treaties with Chippewas, Pillagers, and Lake Winnebagoshish bands—Continued.		
Brought forward		$18,454 73
To R. A. Robbins		606 06
W. H. Schieffelin		103 27
H. W. Shepard		35 20
C. W. Spicer		25 29
D. Tredway		2 45
W. E. Tefft		198 52
W. Whiteside		192 50
J. H. Woodhouse		31 21
H. Wallach		646 00
H. C. Wells		99 00
H. T. Wakeman		1 89
		20,396 12
Deduct repayment:		
By C. P. Luse		1,390 47
		19,005 65
Fulfilling treaties with Chippewas of Red Lake and Pembina tribe of Chippewas:		
By C. P. Luse	$5 78	
Fulfilling treaties with Choctaws:		
To Choctaw Nation		37,532 89
Fulfilling treaties with Choctaws and Chickasaws:		
To W. H. Miles		1,375 52
H. L. Morehouse		3,454 80
H. M. Turner		1,758 78
		6,589 10
Fulfilling treaties with confederated tribes and bands in Middle Oregon:		
To A. Gesner		100 00
Fulfilling treaties with Creeks:		
To Creek Nation		69,968 40
Fulfilling treaties with Crows:		
To H. J. Armstrong		6,179 75
Baltimore and Ohio R. R. Co.		706 05
J. V. Hecker & Co		325 00
G. R. Milburn		6,650 00
Markley, Alling & Co		108 00
T. C. Power		1,170 00
Strange Brothers		30,006 00
		45,144 80
Deduct repayment:		
By H. J. Armstrong		402 50
		44,742 30
Fulfilling treaties with Iowas:		
To G. H. Acklin		9 00
E. F. Church		15 33
E. J. Chaffee		11 33
H. B. Claflin		9 92
S. H. Crane		110 73
Carlisle Indian School		7 25
A. Flagler		67
W. H. Hurlbut		7 30
F. C. Henrick		40 00
Hood, Bonbright & Co		65 94
B. Hansell		5 00
Hampton Normal and Agricultural Institute		12 50
Kelley, Maus & Co		7 68
H. King		9 00
H. C. Linn		1,282 79
P. C. Mehan		25 24
R. Murray		10 49
J. R. Michael		5 88
North River Sugar Refining Company		27 27
Carried forward		1,663 32

Fulfilling treaties with Iowas—Continued.		
Brought forward		$1,663 32
To E. Naumburg		160 51
G. F. Penfield		4 77
J. S. Page		13 80
J. A. Robbins		15 51
W. H. Schieffelin		59 81
J. St. John		81 15
H. W. Shepard		2 50
D. Tredway		10 63
D. Talmage		3 94
H. H. Tobey		8 50
W. Whiteside		6 95
A. E. Whyland		7 25
W. Wood		3 90
W. B. Wills		20 00
L. Wallace		63
J. H. Woodhouse		10 10
H. T. Wakeman		2 75
		2,076 02
Deduct repayment:		
By H. C. Linn		316 08
		1,759 94
Fulfilling treaties with Kansas:		
To C. W. Barstow		1 63
J. Dobson		708 00
G. T. Lane		2 80
L. J. Miles		8,797 87
J. A. Robbins		5 00
W. H. Schieffelin		156 74
		9,672 04
Deduct repayment:		
By D. J. Miles		280 50
		9,391 54
Fulfilling treaties with Kickapoos:		
To G. M. Acklin		11 97
C. W. Barstow		65
H. B. Claflin		22 83
S. Colgate		9 18
A. Corn		1 40
C. H. Castle		38 75
E. F. Church		10 05
C. H. Conover		19
E. J. Chaffee		12 85
J. Culbert		3 39
S. H. Crane		81 76
Carlisle Indian School		136 99
C. H. Deere		113 75
W. W. Davenport		2 95
R. A. Dorman		4 60
J. Dobson		23 60
J. Early		85
A. Flagler		5 40
J. V. Hecker & Co		9 75
W. H. Hurlburt		8 76
Hood, Bonbright & Co		27 43
Hampton Normal and Agricultural Institute		18 76
R. C. Haywood		154 06
H. C. Kelsey		299 28
Kelley, Maus & Co		9 00
H. King		9 00
J. S. Latimer		6 95
H. C. Linn		1,934 49
G. R. Lockwood & Son		8 10
R. Murray		11 41
J. R. Michael		72
F. Mac Veagh		45
North River Sugar Refining Company		95 45
E. Naumburg		57 85
G. Peters		15 75
J. S. Page		50 79
G. F. Penfield		15 90
R. A. Robbins		95 57
Carried forward		3,310 63

Fulfilling treaties with Kickapoos—Continued.		
Brought forward		$3,310 63
To J. St. John		21 35
H. W. Shepard		1 25
W. H. Schieffelin		8 03
J. F. Sullivan		1 20
J. M. Shaw		12 24
D. Tredway		25 28
D. Talmage		5 24
H. H. Tobey		8 50
W. E. Tefft		44 31
A. E. Whyland		17 63
W. Wood		5 20
J. H. Woodhouse		4 18
H. Wallach		30 75
L. Wallace		96
E. Wise		21 42
W. B. Wills		15 00
H. T. Wakeman		6 35
W. Whiteside		15 58
Wilson & Bartholo		8 89
		3,563 99
Deduct repayments:		
By E. Hoag	$2 25	
H. C. Linn	368 59	
J. D. Miles	41	
		371 25
		3,192 74
Fulfilling treaties with Miamies of Eel River:		
To J. Aveline		106 94
F. Aveline		45 84
Lewis Aveline		45 84
Martha, wife of above		45 83
Lewis, father of above		91 67
Cat-a-se-pin, son		45 83
Cat-a-so-pin, father		137 50
Mary Ann Dixon		45 84
Louisa Godfroy		183 33
Elizabeth Godfroy		45 83
Omer, mother of No-ac-que-ze-quah		91 67
Shaw-Kit-two-e-quah		45 83
John Walters		45 83
Sallie Wadsworth		45 83
		1,023 61
Fulfilling treaties with Miamies of Indiana:		
To As-sow-zo-quah		25 84
D. B. Dyer		954 88
Frank Goodboo, alias Mungo Sa		26 02
Catharine Gordon		21 17
Tah-he-mung-wah, alias Thomas Goodbo		25 84
E. B. Townsend		6,367 01
Wah-no-cum-e-quah, alias Mary Rivvir		25 84
Mary Jackson		22 02
Wah-te-ke-ke-quah, deceased.		34 79
Wah-pe-pim-za-quah		95 91
		7,599 32
Deduct repayments:		
By D. B. Dyer	$185 52	
E. B. Townsend	268 66	
		454 18
		7,145 14
Fulfilling treaties with Miamies of Kansas:		
To D. B. Dyer		785 00
Southwest Baptist College		47 92
A. J. Wade		45 20
Carried forward		878 12

Fulfilling treaties with Miamies of Kansas—Continued.		
Brought forward		$878 12
Deduct repayment:		
By D. B. Dyer		8 55
		869 57
Fulfilling treaties with Navajoes:		
By G. Eastman	$1 18	
Fulfilling treaties with Nez Percés:		
To L. L. Baker		242 87
H. N. Cook		18 50
C. H. Castle		24 00
J. Culbert		3 39
J. Dobson		35 40
W. Davis		322 25
W. W. Dodge		22 27
Emerson, Smith & Co		92 80
W. Farrell		51 85
J. E. Gordon		26 16
W. H. Hurlbut		4 50
T. R. Hayes		9 00
Hood, Bonbright & Co		16 66
J. F. Harrison		60 00
G. T. Hawley		1,207 84
J. C. Johnson		298 60
H. King		7 20
J. Linforth		15 20
W. W. Montague		220 00
C. E. Monteith		230 00
J. F. Merrill		10 45
J. H. McCann		76 61
A. C. Nichols		21 08
S. Seller		1 49
J. St. John		64 60
W. H. Schieffelin		208 45
W. J. Wiley		14 57
W. B. Wills		12 00
W. F. Whittier		70 12
H. Wallach		53 15
C. M. Yates		3 09
		3,450 10
Deduct repayments:		
By C. E. Monteith	$206 68	
C. D. Warner	22 70	
		229 38
		3,220 72
Fulfilling treaties with Omahas:		
To G. M. Acklin		28 80
T. A. Ashburner		7 93
J. and B. Allen		5 00
C. W. Barstow		3 25
Max H. C. Brombaker		2 78
A. Corn		4 20
E. F. Church		102 18
H. B. Claflin		55 89
C. H. Conover		2 69
E. J. Chaffee		41 90
S. H. Crane		519 18
E. D. Cornings		9 80
Carlisle Indian School		34 00
H. T. Disbrow		2 83
S. H. Dure		25 00
J. Dobson		70 80
W. W. Davenport		31 85
J. Early		2 32
A. Edwards		436 69
A. Flagler		6 64
D. M. Ferry & Co		89 86
G. V. Hecker & Co		22 50
W. H. Hurlbut		21 24
Hood, Bonbright & Co		22 57
C. B. Hotchkiss		9 55
E. T. Howard		27 07
Hampton Normal and Agricultural Institute		1 38
H. King		14 82
Kelly, Maus & Co		40 16
Carried forward		1,642 83

Fulfilling treaties with Omahas—Continued.		
Brought forward		$1,642 88
To G. R. Lockwood & Son		18 25
P. C. Meehan		24 95
J. R. Michael		33 60
F. Mac Veigh		10 74
R. Murray		4 60
North River Sugar Refining Company		54 54
E. Naumburg		222 55
G. Peters		7 25
J. S. Page		3 15
R. A. Robbins		111 66
W. H. Schieffelin		263 46
J. St. John		113 94
J. M. Shaw		14 67
H. W. Shepard		75
J. F. Sullivan		2 40
W. E. Teft		4 95
D. Tredway		47 35
J. Vore		18 73
A. E. Whyland		23 22
J. H. Woodhouse		31 93
W. Wood		12 48
W. Whiteside		93 13
H. C. Wells		13 20
E. Wise		71 40
G. W. Wilkinson		6,199 90
H. T. Wakeman		1 60
W. B. Wills		64 80
H. Wallach		118 98
Watson & Bartholow		8 77
		9,239 83
Deduct repayment:		
By G. W. Wilkinson		110 31
		9,129 52
Fulfilling treaties with Osages:		
To Interior Department		3,756 96
L. J. Miles		17,886 79
B. Miles		542 75
		22,186 50
Deduct repayments:		
By J. T. Gibson	$123 52	
L. J. Miles	20 05	
		143 57
		22,042 93
Fulfilling treaties with Otoes and Missourias:		
To H. O. Armour		391 30
G. M. Acklin		5 40
C. W. Barstow		6 50
H. B. Claflin		9 00
J. Chatillon & Son		2 50
S. Colgate		22 95
C. H. Conover		2 07
E. J. Chaffee		47 25
J. Culbert		28 25
S. H. Crane		219 61
Carlisle Indian School		7 25
R. A. Dorman		11 50
J. Dobson		636 12
C. H. Deere		90 00
J. Early		1 70
A. Flagler		5 89
E. T. Howard		27 07
G. V. Hecker & Co		12 50
B. Hansell		10 00
W. H. Hurlbut		22 50
Hood, Bonbright & Co		57 00
H. C. Kelsey		348 00
J. S. Latimer		173 75
P. C. Meehan		296 73
R. Murray		20 58
North River Sugar Refining Company		586 30
E. Naumburg		328 40
Carried forward		4,675 23

Fulfilling treaties with Otoes and Missourias—Continued.		
Brought forward		$4,675 23
To J. S. Page		34 05
R. A. Robbins		52 50
W. H. Schieffelin		311 39
J. St. John		184 40
H. C. Slavens		356 90
W. E. Tefft		71 22
A. E. Whyland		18 38
W. Wood		6 50
H. Wallach		88 75
H. C. Wells		13 20
W. Whiteside		59 11
J. H. Woodhouse		108 75
H. J. Wakeman		5 90
		4,675 23
Deduct repayment:		
By L. E. Woodin		21 70
		4,653 53
Fulfilling treaties with Pawnees:		
To J. & B. Allen		108 75
F. J. L. Blandy		2,100 00
J. Culbert		113 00
H. B. Claflin		67 50
C. H. Conover		8 01
E. J. Chaffee		189 00
S. H. Crane		144 00
Carlisle Indian School		29 00
W. W. Davenport		8 71
J. Dobson		1,935 50
C. H. Deere		475 00
Flagler, Forsyth & Bradley		10 00
D. Gillingham		12 36
W. H. Hurlbut		135 00
F. C. Herrick		95 70
Kelley, Maus & Co		27 00
J. S. Latimer		556 00
Markley, Allwig & Co		636 00
J. R. Michael		498 80
R. Murray		11 50
I. Moore		6 18
E. Naumburg		3,511 25
G. Osborne		6 18
G. F. Penfield		31 80
R. A. Robbins		277 45
W. H. Schieffelin		498 72
J. St. John		638 00
H. W. Shepard		10 36
J. W. Scott		16,250 00
W. E. Tefft		284 39
E. A. Webster		80 00
W. Whiteside		923 82
W. Wood		45 50
J. H. Woodhouse		188 43
H. Wallach		335 50
H. T. Wakeman		2 40
W. B. Wills		240 04
		30,490 85
Deduct repayments:		
By C. H. Searing	$600 00	
J. W. Scott	13 35	
J. M. Troth	21 25	
L. E. Woodin	56 76	
		691 36
		29,799 49
Fulfilling treaties with Poncas:		
To G. M. Acklin		9 00
C. H. Castle		190 00
C. H. Conover		3 63
S. H. Crane		183 48
N. S. Crew		1,297 00
Carlisle Indian School		177 25
A. Flagler		6 42
B. Hansell		11 75
F. C. Herrick		192 50
Kelley, Maus & Co		6 00
Carried forward		2,077 02

Fulfilling treaties with Poncas—Continued.		
Brought forward		$2,077 02
To H. C. Kelsey		525 00
Markley, Allwig & Co		98 00
W. C. Osburn		1,846 91
R. A. Robbins		23 13
W. Strange		1,350 00
W. B. Wills		90 00
J. H. Woodhouse		3 25
H. Wallach		573 50
H. T. Wakeman		50
		6,587 31
Deduct repayments:		
By S. H. Crane	$0 83	
L. E. Woodin	3 60	
		4 43
		6,582 88
Fulfilling treaties with Pottawatomies:		
To C. W. Barstow		1 63
S. H. Crane		90 33
A. Flagler		6 80
Kelley, Maus & Co		20 83
H. King		7 50
H. C. Linn		20,375 75
R. Murray		7 41
J. S. Page		1 38
R. A. Robbins		1 16
H. T. Wakeman		55
		20,513 34
Deduct repayment:		
By H. C. Linn		1 09
		20,512 25
Fulfilling treaties with Pottawatomies (transfer account):		
By M. H. Newlin	$278 23	
Fulfilling treaties with Pottawatomies of Huron:		
To E. P. Allen		400 00
Fulfilling treaties with Quapaws:		
To H. O. Armour		120 00
D. B. Dyer		780 00
North River Sugar Refining Company		163 62
		1,063 62
Fulfilling treaties with Sacs and Foxes of the Mississippi:		
To J. V. Carter		16,184 75
C. H. Castle		76 00
C. H. Conover		4 53
H. B. Claflin		58 48
J. Chastillon & Sons		4 86
S. H. Crane		346 59
H. T. Disbrow		3 16
G. L. Davenport		1,194 98
J. Early		4 63
A. Flagler		53 55
Hood, Bonbright & Co		58 88
P. C. Meehan		49 52
R. Murray		34 36
North River Sugar Refining Company		95 45
E. Naumburg		224 50
R. A. Robbins		61 63
Studebaker Bros. Manufacturing Company		3 24
W. H. Schieffelin		303 68
H. C. Slavens		205 90
E. B. Townsend		12,901 90
D. Treadway		30 10
W. E. Tefft		31 26
D. Talmage		22 21
Carried forward		31,954 16

Fulfilling treaties with Sacs and Foxes of the Mississippi—Continued.		
Brought forward		$31,954 16
To I. Taylor		16,430 00
A. E. Whyland		36 75
J. H. Woodhouse		1 75
H. T. Wakeman		17 99
H. C. Wells		6 60
		48,447 25
Deduct repayments:		
By J. V. Carter	$625 64	
G. L. Davenport	1,343 01	
E. B. Townsend	1,991 26	
		3,959 91
		44,487 34
Fulfilling treaties with Sacs and Foxes of the Mississippi (transfer account):		
By Interior Department	$4 50	
Fulfilling treaties with Sacs and Foxes of the Missouri:		
To E. J. Chaffee		3 95
Kelley, Maus & Co		3 84
H. C. Linn		7,802 84
R. Murray		6 00
J. S. Page		3 45
R. A. Robbins		12 32
J. St. John		37 55
H. T. Wakeman		3 75
		7,873 70
Deduct repayment:		
By H. C. Linn		3 70
		7,870 00
Fulfilling treaties with Seminoles:		
To Seminole Nation		28,500 00
Fulfilling treaties with Senecas:		
To D. B. Dyer		3,640 00
Deduct repayment:		
By D. B. Dyer		1,580 00
		2,060 00
Fulfilling treaties with Senecas of New York:		
To B. G. Cosler		11,889 89
I. Hamburg & Son		12 61
		11,902 50
Deduct repayments:		
By B. G. Cosler	$177 89	
Interior Department	155 20	
		333 09
		11,569 41
Fulfilling treaties with Shawnees:		
To Cherokee Nation		5,000 00
Fulfilling treaties with Eastern Shawnees:		
To D. B. Dyer		673 23
Deduct repayment:		
By D. B. Dyer		50 81
		622 42
Fulfilling treaties with Shoshones:		
To H. O. Armour		398 75
J. & B. Allen		72 50
Max H. C. Brombacher		13 49
E. J. Chaffee		125 05
E. F. Church		117 34
J. Culbert		22 60
S. Colgate		68 85
Carried forward		818 58

Fulfilling treaties with Shoshones—Continued.		
Brought forward		$818 58
To H. B. Claflin	223 00	
S. H. Crane	90 43	
Carlisle Indian School	59 22	
J. Dobson	472 00	
R. A. Dorman	23 00	
W. W. Davenport	10 01	
J. Early	8 50	
A. Flagler	8 73	
D. F. Ferry & Co	47 26	
J. Godhelp	100 50	
W. H. Hurlbut	63 25	
G. V. Hecker & Co	50 00	
G. T. Hawley	260 00	
Hood, Bonbright & Co	168 78	
B. Hansell	8 07	
Hampton Normal and Agricultural Institute	55 20	
H. C. Kelsey	139 20	
H. King	75 20	
P. C. Meehan	147 00	
J. S. Mayhugh	2,981 38	
J. R. Michael	165 18	
F. Macveagh	12 32	
North River Sugar Refining Company	245 43	
E. Naumburg	449 48	
G. Peters	75 55	
G. F. Penfield	63 60	
J. S. Page	53 00	
R. A. Robbins	273 98	
J. M. Shaw	12 21	
H. W. Shepard	83 66	
J. St. John	199 75	
J. F. Sullivan	7 20	
W. H. Schieffelin	17 33	
D. Tredway	70 61	
W. E. Tefft	7 57	
D. Talmage	99 80	
H. H. Tobey	17 00	
A. E. Whyland	126 17	
E. A. Webster	390 50	
H. C. Wells	13 20	
H. Wallach	379 75	
W. Whiteside	154 25	
J. H. Woodhouse	15 22	
W. B. Wills	135 00	
E. Wise	71 40	
H. T. Wakeman	11 54	
Watson & Bartholow	41 51	
	9,001 52	
Deduct repayment:		
By J. S. Mapugh	405 38	
	8,596 14	
Fulfilling treaties with Sioux Yankton tribe:		
To G. M. Acklin	14 40	
W. D. E. Andrus	110 16	
W. T. Buckley	437 74	
C. W. Barstow	1 63	
A. Corn	26 25	
S. Colgate	91 80	
H. B. Claflin	54 96	
C. H. Conover	60 57	
S. H. Crane	537 66	
Carlisle Indian School	48 50	
J. Dobson	1,416 00	
W. W. Davenport	62	
A. F. Lagler	6 25	
J. Godnelp	201 00	
W. H. Hurlbut	207 37	
Hood, Bonbright & Co	298 54	
Kelley, Maus & Co	31 14	
J. S. Latimer	417 00	
R. Murray	16 34	
E. Naumburg	2,106 07	
J. S. Page	18 21	
Carried forward	6,102 21	

Fulfilling treaties with Sioux Yankton tribe—Continued.		
Brought forward		$6,102 21
To W. M. Ridpath	8,544 70	
R. A. Robbins	172 67	
W. H. Schieffelin	289 58	
W. E. Tefft	356 79	
W. Whiteside	905 07	
J. H. Woodhouse	160 48	
W. Wood	26 00	
H. Wallach	2,278 75	
H. T. Wakeman	2 84	
	18,839 09	
Deduct repayment:		
By W. M. Ridpath	198 88	
	18,640 21	
Fulfilling treaties with Sisseton, Wahpeton, and Santee Sioux of Lake Traverse and Devil's Lake:		
To J. B. A. Brouillet	1,053 50	
Bowman & Barrett	50 00	
C. Crissey	278 62	
C. H. Castle	116 25	
H. G. Haas	1,005 48	
M. Johnson	2,478 91	
J. F. Moore	75 00	
W. Whiteside	990 04	
	6,047 80	
Deduct repayments:		
By C. Crissey	$1,125 46	
J. W. Cramsie	35 53	
Interior Department	2,642 59	
	3,803 58	
	2,244 22	
Fulfilling treaties with Sisseton and Santee Sioux of Lake Traverse and Devil's Lake (transfer account):		
By C. Crissey	$67 00	
E. H. C. Hooper	93 43	
	160 43	
Fulfilling treaties with Six Nations of New York:		
To D. P. Andrews	1,000 00	
W. T. Buckley	711 44	
Baltimore and Ohio R. R.	97 25	
Chamberlin Manufacturing Company	500 00	
Cynthia Farmer	45 23	
O. Farmer	16 54	
A. Hill	16 07	
H. Halftown	23 25	
Interior Department	155 20	
J. Isaac	16 07	
A. D. Johnson	20 01	
E. Johnson	32 22	
A. John, jr.	24 00	
W. Kennedy	39 80	
D. La Fort	16 54	
C. Mades	176 35	
J. A. Main	15 00	
W. H. Schieffelin	188 16	
W. E. Tefft	2,582 40	
	5,675 53	
Deduct repayments:		
By D. P. Andrews	$27 66	
B. G. Cosler	155 20	
E. Stephens	1,000 00	
	1,182 86	
	4,492 67	

Fulfilling treaties with Winnebagoes:

To G. M. Acklin	$27 00
J. and B. Allen	18 13
C. W. Barstow	3 25
A. Corn	7 00
E. F. Church	337 01
H. B. Claflin	17 25
E. J. Chaffee	66 25
S. H. Crane	327 46
Carlisle Indian School	87 00
R. A. Dorman	11 50
H. T. Disbrow	2 20
J. Dobson	1,752 63
C. H. Deere	406 25
W. W. Davenport	9 78
J. Early	85
A. Flagler	24 22
D. M. Ferry & Co	90 99
W. H. Hurlbut	22 75
W. F. Halleck	54,681 06
B. Hansell	5 00
Hartford Woven Wire Mattress Company	116 50
Hood, Bonbright & Co	706 63
Hampton Normal and Agricultural Institute	63 88
Kelley, Maus & Co	44 58
H. King	11 25
G. R. Lockwood & Son	24 00
G. T. Lane	3 00
R. Murray	28 90
J. R. Michael	63 94
E. Naumburg	1,849 55
G. Peters	9 00
J. S. Page	12 60
R. A. Robbins	114 33
W. H. Schieffelin	375 24
J. M. Shaw	6 90
J. St. John	105 00
H. W. Shepard	5 00
H. H. Tobey	25 50
W. E. Tefft	530 27
D. Tredway	31 39
W. Word	13 00
A. E. Whyland	21 82
H. C. Wells	198 00
G. W. Wilkinson	11,604 44
J. H. Woodhouse	50 52
H. T. Wakeman	4 14
H. Wallach	142 43
Watson & Bartholow	8 98
	74,068 37
Deduct repayments:	
By A. Edwards $408 23	
G. W. Wilkinson .. 71 37	
	479 60
	73,588 77

Fulfilling treaties with Yakamas:

To R. H. Milroy	5,243 48

Fulfilling treaties with Cherokees, proceeds of school lands:

To Cherokee Nation	40,000 00

Fulfilling treaties with Creeks, proceeds of lands (transfer account):

By H. W. Ganett $628 77	

Fulfilling treaties with Menomonees, proceeds of lands:

To D. P. Andrews	5,909 53

Fulfilling treaties with Miamies of Kansas, proceeds of lands:

To G. A. Colton	1,757 57

Fulfilling treaties with Pawnees, proceeds of lands:

To Pawnee Indians	302,626 22

Fulfilling treaties with Pottawatomies, proceeds of lands:

To M. H. Newlin	$182 69

Fulfilling treaties with Sacs and Foxes of the Missouri, proceeds of lands:

To G. M. Acklin	5 40
E. F. Church	15 41
S. Colgate	3 67
H. B. Claflin	3 94
S. H. Crane	68 05
Carlisle Indian School	263 50
C. H. Deere	97 50
W. H. Hurlbut	3 65
F. C. Herrick	240 00
B. Hansell	5 00
Hood, Bonbright & Co	21 39
H. C. Kelsey	348 00
H. C. Linn	1,466 86
P. C. Meehan	13 30
R. Murray	6 15
North River Sugar Refining Company	13 64
E. Naumburg	58 02
G. Peters	45 00
W. H. Schieffelin	30 38
D. Tredway	1 40
D. Talmage	1 25
A. E. Whyland	5 53
W. Wood	2 60
J. H. Woodhouse	2 91
W. B. Wills	10 00
Watson & Bartholow	4 51
	2,737 06
Deduct repayment:	
By H. C. Linn	148 30
	2,588 76

Proceeds of Choctaw Orphan Reservation:

To H. M. Teller, trustee	1,608 04

Proceeds of New York Indian lands in Kansas:

By D. B. Dyer $1,184 43	

Proceeds of Sioux Reservations, Minnesota and Dakota:

To T. A. Ashburner	47 58
J. & B. Allen	50 00
G. M. Acklin	54 00
R. A. Broadbent	13,669 90
C. W. Barstow	2 60
Max H. C. Brombacher	87
A. Barclay	708 79
Cooper Manufacturing Company	853 73
J. Culbert	84 75
E. F. Church	829 14
N. S. Crew	16,353 75
E. J. Chaffee	659 00
S. H. Crane	1,044 05
H. B. Claflin	924 11
S. Colgate	114 75
C. H. Conover	8 32
C. H. Castle	1,192 50
E. D. Comings	9 80
Carlisle Indian School	218 28
J. W. Cramsie	2,141 00
J. Dobson	2,162 00
W. W. Davenport	21 68
C. H. Deere	625 00
J. Early	32 01
A. Flagler	57 91
J. Godhelp	100 50
M. W. Glenn	442 45
W. H. Hurlbut	261 50
G. V. Hecker & Co	50 00
H. G. Haas	430 86
B. Hansell	38 69
Carried forward	43,189 52

Proceeds of Sioux Reservations, Minnesota and Dakota—Continued.		
Brought forward		$43,189 52
To Hampton Normal and Agricultural Institute		2 75
Hood, Bonbright & Co		464 63
Haskell & Wood		175 00
Interior Department		35
A. N. Johnson		5,016 90
H. King		2 64
I. Lightner		587 45
G. R. Lockwood & Son		204 08
G. T. Lane		3 62
Markley, Alling & Co		501 85
L. H. Maxfield		4,620 00
P. C. Meehan		198 47
R. Murray		130 86
J. R. Michael		36 26
F. MacVeigh		13 50
E. Naumburg		5,111 75
G. Peters		86 63
G. F. Penfield		47 70
J. S. Page		49 45
R. A. Robbins		1,124 69
Shaubut & Hodgson		1,980 00
J. M. Shaw		25 75
W. H. Schieffelin		738 62
J. St. John		1,547 00
J. F. Sullivan		48 00
D. Tredway		94 75
W. E. Tefft		994 44
H. H. Tobey		25 50
D. Talmage		89 32
B. W. Thompson		14,438 41
E. A. Webster		1,548 00
W. Whiteside		631 97
E. A. Whyland		72 50
H. C. Wells		79 20
J. H. Woodhouse		322 04
W. Wood		32 50
H. Wallach		1,417 25
W. B. Wills		372 00
E. Wise		374 85
E. B. Woolworth		27 00
L. Wallace		9 38
L. Woodard		3,143 00
H. T. Wakeman		74 86
		89,654 44
Deduct repayments:		
By C. Crissey	$2,511 10	
J. W. Cramsie	106 15	
W. H. Hurlbut	1 35	
I. Lightner	650 39	
B. W. Thompson	2,626 52	
H. Wallach	9 86	
		5,905 37
		83,749 07
Civilization fund:		
To S. C. Armstrong		56 55
Baltimore and Ohio R. R. Co.		1,312 60
Baltimore and Potomac R. R.		985 75
G. Le Roy Brown		483 60
J. Chambers		11 50
D. B. Dyer		1,475 00
E. W. Denison		188 87
G. R. Fana		5 00
Miss A. C. Fletcher		866 00
W. Graham		5 00
Hampton Normal and Agricultural Institution		50 00
W. J. Hadley		450 00
A. Kinney		221 10
H. Kendall		100 00
H. C. Kelsey		485 00
Oregon Asylum for the Insane, Salem, Oreg		181 42
Potomac Steamboat Company.		2 00
A. L. Riggs		14 85
F. M. Wadsworth		30 00
Carried forward		6,924 24

Civilization fund—Continued.		
Deduct repayments:		
Brought forward		$6,924 24
By appropriation account	$24 00	
C. Crissey	87 15	
J. W. Cramsie	33 55	
D. B. Dyer	100 67	
G. Eastman	1 07	
Interior Department	3,756 96	
C. E. Monteith	15	
R. H. Pratt	88 58	
M. C. Wilkinson	20	
		4,092 33
		2,831 91
Civilization fund (transfer account):		
By C. Crissey	$109 83	
R. H. Pratt	31 29	
	141 12	
Interest due Cherokees on land sold to Osages:		
To Cherokee Nation		36,206 88
Interest on Cherokee asylum fund:		
To Cherokee Nation		3,207 36
Interest on Cherokee national fund:		
To Cherokee Nation		30,760 42
Interest on Cherokee national fund, 1884:		
To Cherokee Nation		26,060 00
Interest on Cherokee school fund:		
To Cherokee Nation		26,006 44
Interest on Cherokee school fund, 1884:		
To Cherokee Nation		2,410 00
Interest on Cherokee orphan fund:		
To Cherokee Nation		12,775 16
Interest on Chickasaw national fund:		
To Chickasaw Nation		48,469 28
Interest on Chickasaw national fund, 1884:		
To Chickasaw Nation		19,820 00
Interest on Chippewa and Christian Indian fund:		
To H. C. Linn		2,128 02
Deduct repayment:		
By H. C. Linn		16 77
		2,111 25
Interest on Choctaw school fund:		
To Choctaw Nation		2,473 64
Creek orphan fund:		
By J. Q. Tufts	$114 74	
Interest on Creek orphan fund:		
By J. Q. Tufts	$383 27	
Interest on Choctaw general fund:		
To Choctaw Nation		184 44
Interest on Choctaw general fund, 1884:		
To Choctaw Nation		27,000 00
Interest on Delaware general fund:		
To J. Q. Tufts		42,423 90
Deduct repayment:		
By J. Q. Tufts		5,772 16
		36,651 74

Interest on Delaware general fund, 1884:		
To J. Q. Tufts		$8,930 00
Interest on Iowa fund:		
To J. V. Carter		1,283 00
H. C. Linn		5,260 00
		6,543 00
Deduct repayments:		
By J. V. Carter	$2 60	
H. C. Linn	94 68	
		97 28
		6,445 72
Interest on Iowa fund, 1884:		
To J. V. Carter		3,520 00
Interest on Kansas school fund:		
To G. M. Acklin		36 00
Max H. C. Brombacker		5 25
E. F. Church		33 50
A. Caldwell		206 25
H. B. Claflin		51 99
E. J. Chaffee		29 63
S. H. Crane		49 13
Carlisle Indian School		52 84
W. W. Davenport		5 93
J. Early		85
H. H. Hurlbut		47 75
B. Hansell		13 07
C. B. Hotchkiss		15 00
F. C. Herrick		40 00
Hood, Bonbright & Co		19 93
Hampton Normal Agricultural Institute		110 78
H. King		18 90
P. C. Meehan		62 04
L. J. Miles		3,756 61
F. Mac Veigh		9 00
J. R. Michael		3 06
North River Sugar Refining Company		190 89
E. Naumburg		401 50
G. Peters		10 50
J. S. Page		2 57
R. A. Robbins		101 86
E. H. Smith		22 71
J. M. Shaw		4 10
J. St. John		55 74
J. F. Sullivan		6 00
H. W. Shepard		10 00
H. C. Slavens		484 00
W. E. Tefft		18 79
D. Tredway		38 91
A. E. Whyland		39 48
J. H. Woodhouse		66 32
H. T. Wakeman		2 75
		6,023 63
Interest on Kaskaskia, Peoria, Wea, and Piankeshaw fund:		
To D. B. Dyer		4,801 00
Interest on Kaskaskia, Peoria, Wea, and Piankeshaw school fund:		
To University of Notre Dame		347 20
Deduct repayment:		
By D. B. Dyer		215 96
		131 24
Interest on Kaskaskia, Peoria, Wea, and Piankeshaw school fund, 1882:		
To D. B. Dyer		383 75
Interest on Kaskaskia, Peoria, Wea, and Piankeshaw school fund, 1883:		
To D. B. Dyer		951 25
Interest on Kickapoo general fund:		
To H. O. Armour		$195 39
P. C. Meehan		36 90
H. C. Linn		6,466 77
A. E. Whyland		36 36
		6,735 42
Deduct repayment:		
By H. C. Linn		38 24
		6,697 18
Interest on L'Anse and Vieux de Sert Chippewa fund:		
By E. P. Allen	$7 75	
Interest on Menomonee fund:		
To D. P. Andrews		7,100 00
N. A. Gray		262 29
W. Wood		13 00
		7,375 29
Deduct repayments:		
By D. P. Andrews	$65 30	
E. Stephens	90 20	
		155 50
		7,219 79
Interest on Menomonee fund, 1884:		
To D. P. Andrews		950 00
Interest on Osage fund:		
To G. M. Acklin		54 00
J. and B. Allen		18 13
Baltimore and Ohio R. R.		428 56
E. F. Church		70 94
A. Caldwell		1,650 00
H. B. Claflin		11 89
C. H. Castle		61 50
C. H. Conover		19 73
E. J. Chaffee		36 00
S. H. Crane		357 79
Carlisle Indian School		14 50
W. W. Davenport		7 81
J. Early		2 46
A. Flagler		10 30
Flagler, Forsyth and Bradley		1 93
W. H. Hurlbut		22 50
C. B. Hotchkiss		15 00
F. C. Herrick		760 00
B. Hansell		38 23
H. Heidleberg		1,530 00
Hampton Normal and Agricultural Institute		1,111 50
Hood, Bonbright & Co		8 91
Kelley, Maus & Co		7 68
H. King		144 00
G. R. Lockwood & Son		30 20
R. Murray		14 39
L. J. Miles		150,363 62
J. R. Michael		43 93
F. MacVeigh		9 00
Markley, Alling & Co		39 59
B. Miles		529 89
North River Sugar Refining Company		190 89
A. A. Newman		877 50
G. F. Penfield		127 20
G. Peters		39 75
R. H. Pratt		5,116 24
R. A. Robbins		1,429 72
Studebaker Bros. Manufacturing Company		27 00
W. H. Schieffelin		612 39
J. M. Shaw		9 40
J. St. John		96 54
St. Francis Institution		444 20
H. H. Tobey		8 50
A. E. Whyland		37 01
H. Wallach		35 25
J. H. Woodhouse		15 68
H. T. Wakeman		19 55
Carried forward		166,500 80

Interest on Osage fund—Continued.		
Brought forward		$166,500 80
Deduct repayment:		
By L. J. Miles		687 93
		165,812 87
Interest on Osage school fund:		
To S. H. Crane		109 00
J. Kishlman		445 78
G. R. Lockwood & Son		18 60
B. Miles		1,100 63
L. J. Miles		2,070 00
J. H. Woodhouse		34 80
		3,778 81
Deduct repayment:		
By L. J. Miles		408 60
		3,370 21
Interest on Otoe and Missouri fund:		
To H. O. Armour		150 52
J. & B. Allen		5 00
T. A. Ashburner		11 90
G. M. Acklin		6 20
Max H. C. Brombacher		1 01
J. L. Blandy		50 00
E. F. Church		36 26
H. B. Claflin		30 00
E. J. Chaffee		37 75
W. W. Davenport		5 74
J. Dobson		94 40
J. Early		85
W. H. Hurlbut		9 13
Hood, Bonbright & Co		48 49
Hampton Normal and Agricultural Institute		2 00
H. King		1 32
G. R. Lockwood & Son		63 38
P. C. Meehan		63 60
J. R. Michael		44
F. Mac Veigh		6 52
R. Murray		4 60
W. C. Oburn		4,103 00
R. A. Robbins		26 68
H. W. Shepard		1 84
J. St. John		47 03
J. W. Scott		6,563 50
W. E. Tefft		16 94
D. Tredway		34 18
L. Wallace		2 85
L. E. Woodin		1,496 50
W. Whiteside		41 25
A. E. Whyland		24 75
J. H. Woodhouse		8 45
W. B. Wills		35 00
H. Wallach		85 50
		13,116 58
Deduct repayments:		
By J. W. Scott	$147 59	
L. E. Woodin	1,029 57	
		1,177 16
		11,939 42
Interest on Ponca fund:		
To I. Lightner		841 50
J. W. Scott		2,658 50
		3,500 00
Deduct repayments:		
By I. Lightner	$27 60	
J. W. Scott	2 06	
		29 66
		3,470 34
Interest on Pottawatomie education fund:		
To H. O. Armour		195 26
G. M. Acklin		15 81
Carried forward		211 07

Interest on Pottawatomie education fund—Continued.		
Brought forward		$211 07
To J. & B. Allen		2 50
Max H. C. Brombacher		1 05
A. Corn		1 40
S. Colgate		16 52
C. H. Castle		6 50
E. F. Church		15 58
E. J. Chaffee		14 35
J. Culbert		5 65
S. H. Crane		60 13
H. B. Claflin		19 16
Carlisle Indian School		10 24
A. Caldwell		43 25
C. Deen		15 00
R. A. Dorman		6 90
J. Dobson		23 60
W. W. Davenport		7 62
J. Early		1 26
A. Flagler		2 72
G. V. Hecker & Co		9 75
W. H. Hurlbut		11 46
Hood, Bonbright & Co		30 57
Hampton Normal and Agricultural Institute		46
R. C. Haywood		19 27
H. C. Kelsey		34 80
J. S. Latimer		13 90
H. C. Linn		1,975 50
G. R. Lockwood & Son		13 46
P. C. Meehan		39 52
R. Murray		2 76
J. R Michael		3 58
F. Mac Veigh		45
North River Sugar Refining Company		109 08
E. Aaumburg		62 69
G. Peters		2 25
J. S. Page		28 00
G. F. Penfield		15 83
R. A. Robbins		123 74
W. H. Schieffelin		18 04
H. C. Skavens		148 20
J. St. John		19 05
H. W. Shepard		1 59
J. F. Sullivan		2 40
J. M. Shaw		7 31
D. Tredway		24 58
W. E. Tefft		77 27
D. Talmage		4 99
H. H. Tobey		8 50
A. E. Whyland		73 72
W. Wood		5 20
J. H. Woodhouse		25 69
W. Whiteside		17 59
E. Wise		21 42
W. B. Wills		10 00
H. T. Wakeman		11 85
H. Wallach		23 16
L. Wallace		96
Watson & Bartholow		17 85
		3,480 94
Deduct repayments:		
By H. C. Linn	$310 96	
M. H. Newlin	182 69	
		493 65
		2,987 29
Interest on Pottawatomie education fund (transfer account):		
By H. M. Newlin		$584 39
Interest on Pottawatomie general fund:		
To H. C. Linn		7,130 00
Interest on Pottawatomie Mills fund:		
To C. H. Conover		19
F. C. Herrick		350 25
G. Peters		48 00
		398 44

Interest on Sac and Fox of the Mississippi fund:		
To I. A. Taylor		$11,250 53
Interest on Seneca fund:		
To D. B. Dyer		2,048 98
Deduct repayment:		
By D. B. Dyer		1,024 49
		1,024 49
Interest on Seneca fund, Towanda Band:		
To B. G. Cosler		4,347 50
Deduct repayment:		
By B. G. Cosler		478 87
		3,868 63
Interest on Seneca and Shawnee fund:		
To D. B. Dyer		775 45
Deduct repayment:		
By D. B. Dyer		209 11
		566 34
Eastern Shawnee fund:		
To D. B. Dyer		81 07
Interest on Eastern Shawnee fund:		
To D. B. Dyer		480 06
Deduct repayment:		
By D. B. Dyer		58 91
		421 15
Interest on Stockbridge consolidated fund:		
To D. P. Andrews		3,658 51
A. Miller		280 50
		3,939 01
Deduct repayments:		
By D. P. Andrews	$106 00	
E. Stephens	38 71	
		144 71
		3,794 30
Interest on Ute 5 per cent. fund:		
To Atchison, Topeka and Santa Fé R. R		81 60
Baltimore and Potomac R. R		195 00
D. M. Ferry & Co		10 82
J. F. Gardner		425 00
L. M. Kelley		82 00
H. Kendall		1,127 25
W. Patten		1,625 00
War Department		765 53
		4,312 20
Deduct repayment:		
By H. Page		164 48
		4,147 72
Interest on Ute 4 per cent. fund:		
To G. Dresser		200 00
E. W. Davis		11,972 44
Eleanor L. Eaton		200 00
Mr. and Mrs. A. S. Eskridge		200 00
Maggie Gordon		500 00
J. F. Gardner		15,133 20
Arevilla D. Meeker		500 00
Sarah M. Post		500 00
Sophronia Price		500 00
W. Patten		13,353 45
G. L. Shepard		200 00
T. F. Thompson		200 00
Carried forward		43,459 09

Interest on Ute 4 per cent. fund—Continued.		
Brought forward		$43,459 09
Deduct repayments:		
By J. J. Critchlow	$736 34	
W. Patten	1,222 74	
		1,959 08
		41,500 01
Payments to North Carolina Cherokees:		
To B. C. Hobbs		1,977 22
Incidental expenses Indian service in Arizona, 1884:		
To H. O. Armour		$200 56
G. M. Acklin		45 85
Max H. C. Brombacher		3 10
J. W. Clark		3,952 28
H. B. Claflin		83 22
E. F. Church		28 57
S. Colgate		35 80
S. H. Crane		249 45
Carlisle Indian School		123 90
J. Chatillon & Son		3 24
R. A. Dorman		18 40
J. Dobson		177 00
C. H. Deese		109 50
H. T. Disbrow		89
H. B. Denman		4,200 42
W. W. Davenport		3 50
J. Early		2 96
A. Flagler		37 65
G. V. Hecker & Co		29 25
B. Hansell		12 26
W. H. Hurlbut		22 50
Hood, Bonbright & Co		51 44
C. B. Hotchkiss		3 10
H. H. Jackson		5,305 00
H. C. Kelsey		1 38
Kelly, Maus & Co		11 83
H. King		4 25
G. T. Lane		9 05
P. C. Meehan		89 71
R. Murray		32 52
F. MacVeagh		8 85
J. R. Michael		12 51
E. Naumburg		82 50
North River Sugar Refining Company		13 64
G. T. Penfield		55 01
J. S. Page		5 00
R. A. Robbins		163 13
W. H. Schieffelin		437 58
H. W. Shepard		1 60
J. F. Sullivan		9 60
H. C. Slavens		33 58
W. E. Tefft		35 39
H. H. Tobey		17 00
A. E. Whyland		73 26
P. P. Wilcox		200 00
J. H. Woodhouse		97 74
H. C. Wells		33 00
W. Whiteside		16 50
H. T. Wakeman		120 75
Watson & Bartholow		16 94
L. Zeckendorf		4,361 94
		20,644 10
Deduct repayment:		
By J. W. Clark		260 41
		20,383 69
Incidental expenses Indian service in Arizona, 1883:		
To —— Beecher		25 00
Colorado Steam and Navigation Company		25 00
Central Pacific R. R		66 30
T. E. Ellis		479 36
A. H. Jackson		52 00
Carried forward		647 66

Incidental expenses Indian service in Arizonia, 1883—Continued.

Brought forward		$647 66
To P. Louis		39 95
J. Mahon		134 50
Tom Sawyer		3 83
—— Vickapin		95 85
L. Zeckendork		419 00
		1,340 79
Deduct from repayments:		
By J. W. Clark	$390 92	
J. H. Fleming	72 30	
Interior Department	1,017 20	
A. H. Jackson	245 31	
R. G. Wheeler	404 36	
		2,130 09
Excess of repayments		789 30

Incidental expenses Indian service in Arizona, 1882:

To J. Biggs		76 62
Missouri Pacific R. R		16 10
T. Tobin		24 50
		117 22
Deduct from repayments:		
By G. Eastman	$1 03	
J. H. Fleming	770 00	
R. G. Wheeler	20 00	
		791 03
Excess of repayments		673 81

Incidental expenses Indian service in Arizona, 1881 and prior years:

By J. Biggs	$108 62	
J. H. Stout	330 00	
		438 62

Incidental expenses Indian service in Arizona 1n 1881 and prior years (transfer account):

By J. Biggs	$0 02	
G. Eastman	37	
Interior Department	498 41	
		498 80

Incidental expenses Indian service in California, 1884:

To G. M. Acklin	0 44
C. G. Belknap	1,160 00
M. Byrne	20 25
L. L. Baker	315 67
Bright & Chute	75
H. B. Claflin	89 36
E. F. Church	117 00
H. N. Cook	6 87
J. Culbert	56 50
E. J. Chaffee	244 08
S. H. Crane	7 16
J. Dobson	1,286 20
W. Davis	19 61
W. W. Dodge	704 93
C. H. Deese	60 00
A. Flagler	80
W. Faull	116 11
J. Godhelp	140 70
J. E. Gordon	354 23
A. Gray	2,223 93
W. H. Hurlbut	173 63
Hood, Bonbright & Co	501 67
J. F. Harrison	197 33
G. T. Hawley	688 59
J. Hackney	8 00
W. A. Jones	180 85
J. C. Johnson	5 70
Kelley, Maus & Co	31 27
Carried forward	8,711 63

Incidental expenses Indian service in California, 1884—Continued.

Prought forward		$8,711 63
To G. R. Lockwood & Son		1 08
S. S. Lawson		12 50
J. R. Michael		14 85
W. W. Montague		74 50
J. G McCallum		2,014 88
J. T. Merrill		154 74
J. H. McCann		29 48
A. C. Nichols		100 71
E. Naumburg		785 40
C. Porter		7,039 60
G. Peters		161 60
R. A. Robbins		47 22
C. F. Roe		2 60
H. B. Sheldon		2,160 00
S. Seller		14 28
R. W. Simpson		4 39
J. St. John		338 45
W. H. Schieffelin		569 66
C. B. Stone		39 22
W. E. Tefft		86 79
W. Whiteside		251 88
W. J. Wiley		656 26
W. B. Wills		846 00
H. Wallach		1,193 50
J. H. Woodhouse		21 18
W. B. Wiggins		18 75
W. F. Whittier		87 43
E. A. Webster		98 00
C. M. Yates		29 85
		25,560 43
Deduct repayments:		
By C. G. Belknap	$6 15	
W. H. Schieffelin	1 16	
H. B. Sheldon	44 86	
		52 17
		25,508 26

Incidental expenses Indian service in California, 1883:

To Central Pacific R. R		26 55
Interior Department		2 21
		28 76
Deduct from repayments:		
By C. G. Belknap	$43 50	
S. S Lawson	1 57	
H. B. Sheldon	127 03	
		171 10
Excess of repayments		142 34

Incidental expenses Indian service in California, 1882:

By Interior Department	$5 56	
H. B. Sheldon	4 50	
		10 06

Incidental expenses Indian service in California, 1881 and prior years (transfer account):

To J. L. Broadus	1 00
C. G. Sawtell	3,140 93
	3,141 93

Incidental expenses Indian service in California, 1881 and prior years:

By J. L. Broadus	$17 82

Incidental expenses Indian service in Colorado, 1884:

To Atchison, Topeka and Sante Fé R. R	20 40
Baltimore and Ohio R	370 55
E. W. Denison	117 49
W. Patten	950 00
	1,458 44

Incidental expenses Indian service in Colorado, 1883:
To Interior Department $250 00

Incidental expenses Indian service in Colorado, 1882:
To H. Page 108 97
Deduct from repayments:
By Interior Department $250 00
W. Patten 59 65
309 65
Excess of repayments.... 200 68

Incidental expenses Indian service in Colorado, 1881 and prior years (transfer account):
By H. Page $192 39

Incidental expenses Indian service in Dakota, 1884:
To G. M. Acklin 18 00
J. W. Cramsie 430 00
Carlisle Indian School 146 75
J. G. Gasman 200 00
A. J. Gifford 150 00
J. Kauffman 533 00
R. London 22 50
V. T. McGillycuddy 655 00
J. McLanglin 150 00
Markley, Alling & Co 9 50
Marion Safe Company 150 00
W. M. Ridpath 1,365 00
W. A. Swan 250 00
B. W. Thompson 310 00
J. G. Wright 180 00
Winchester Repeating Arms Company 120 80
4,690 55
Deduct repayments:
By V. T. McGillycuddy $250 00
B. W. Thompson 96 95
346 95
4,343 60

Incidental expenses Indian service in Dakota, 1883:
To G. H. Spencer 150 44
Deduct from repayments:
By C. Crissey $147 00
J. W. Cramsie 9 31
J. Kauffman 22 12
V. T. McGillycuddy 222 25
J. McLaughlin 48 61
W. H. Parkhurst ... 138 37
W. M. Ridpath 41 14
J. G. Wright 57 61
686 41
Excess of repayments 535 97

Incidental expenses Indian service in Dakota, 1882:
To R. F. Hunter $150 00
Deduct repayment:
By T. C. Power 150 00

Incidental expenses Indian service in Dakota, 1881 and prior years:
By R. S. Gardner $211 30
V. T. McGillycuddy 29 35
240 65

Incidental expenses Indian service in Dakota, 1881 and prior years, (transfer account):
To C. Crissey 386 24
E. H. C. Hooper 42 23
Carried forward 428 47

Incidental expenses Indian service in Dakota, 1881 and prior years (transfer account)—Continued.
Brought forward $428 47
Deduct repayment:
By W. D. E. Andrus 79 80
348 67

Incidental expenses Indian service in Dakota, 1879 and prior years:
To Daily Pioneer Press 35 20
Minneapolis Tribune 22 40
57 60

Incidental expenses Indian service in Idaho, 1884:
To A. L. Cook 100 00
J. Harries 100 00
C. E. Monteith 764 00
964 00

Incidental expenses Indian service in Idaho, 1883:
By A. L. Cook $42 15
J. Harries 19 00
C. E. Monteith 80
61 95

Incidental expenses Indian service in Idaho, 1882:
By J. Harries $2 50

Incidental expenses Indian service in Idaho and prior years:
By W. H. Danielson $0 28

Incidental expenses Indian service in Idaho, 1881 and prior years (transfer account):
By Interior Department $245 69

Incidental expenses Indian service in Montana, 1884:
To H. J. Armstrong 1,656 00
R. A. Allen 171 00
W. L. Lincoln 965 00
T. C. Power 1,396 00
P. Ronan 300 00
S. E. Snider 312 00
J. Young 300 00
5,100 00
Deduct repayment:
By J. Young 100 00
5,000 00

Incidental expenses Indian service in Montana, 1883:
To C. Aubrey 500 00
Milburn Wagon Company ... 53 20
553 20
Deduct from repayments:
By H. J. Armstrong ... $810 75
P. Ronan 250 50
J. Young 286 50
1,347 75
Excess of repayments ... 794 55

Incidental expenses Indian service in Montana, 1882:
By C. A. Maxwell $1 00
J. Young 193 10
194 10

Incidental expenses Indian service in Montana, 1881 and prior years:
By L. H. Carpenter $3 98

Incidental expenses Indian service in Montana, 1881 and prior years (transfer account):
To L. H. Carpenter..... $3 98

Incidental expenses Indian service in Nevada, 1884:

To G. M. Acklin		18 72
C. W. Barstow		3 25
E. J. Chaffee		45 83
S. Colgate		91 80
H. B. Claflin		50 84
C. H. Castle		76 00
C. H. Conover		1 17
S. H. Crane		196 52
J. Dobson		236 00
R. A. Dorman		11 50
C. H. Deere		38 00
J. Early		4 25
A. Flager		22 32
D. M. Terry & Co		31 75
E. Griswold		1,256 64
W. H. Hurlbut		9 13
Hood, Bonbright & Co		11 29
Hampton Normal and Agricultural Institute		6 95
H. King		7 00
G. T. Lane		3 60
P. C. Meehan		86 80
J. M. McMaster		4,127 00
J. S. Marpugh		2,620 28
J. R. Michael		2 88
R. Murray		10 10
North River Sugar Refining Company		190 89
G. Peters		120 00
J. S. Page		81 60
G. F. Penfield		190 80
R. A. Robbins		117 55
W. H. Schieffelin		25 50
H. W. Shepard		32 00
C. B. Stone		1,989 00
J. St. John		82 13
F. L. Sommer		39 71
W. E. Tefft		15 00
E. A. Webster		170 00
H. C. Wells		19 80
W. Wood		6 50
J. H. Woodhouse		27 58
H. Wallach		409 50
W. B. Wills		85 00
H. T. Wakeman		11 00
A. E. Whyland		8 55
Watson & Bartholow		9 00
		12,600 73

Incidental expenses Indian service in Nevada, 1883:

To Central Pacific R. R		5 00
Interior Department		17 20
J. S. Mayhugh		67 80
		90 00
Deduct from repayments:		
By J. S. Mayhugh	$208 61	
P. P. Willcox	17 20	
		225 81
Excess of repayments		135 81

Incidental expenses Indian service in Nevada, 1881 and prior years:

By J. M. McMasters		40
Western Union Telegraph Co.		3 73
		4 13

Incidental expenses Indian service in New Mexico, 1884:

To Atchison, Topeka and Santa Fé R. R		$38 20
Baltimore and Ohio R. R		261 45
E. W. Denison		149 87
W. H. H. Lewellyn		787 50
Markley, Alling & Co		10 30
D. M. Riordan		1,278 00
P. Sanches		2,405 00
W. H. Schieffelin		159 21
		5,089 53
Deduct repayments:		
By Interior Department	$149 87	
P. Sanches	17 45	
		167 32
		4,922 21

Incidental expenses Indian service in New Mexico, 1883:

By Interior Department	$22 35	
W. H. H. Lewellyn	184 31	
B. M. Thomas	218 04	
		424 70

Incidental expenses Indian service in New Mexico, 1882:

To R. M. Thomas		273 50
Deduct repayment:		
By W. H. H. Lewellyn		5 50
		268 00

Incidental expenses Indian service in New Mexico, 1881 and prior years:
By J. M. Shaw..... $2 79

Incidental expenses Indian service in New Mexico, 1881 and prior years (transfer account):

By G. Eastman	$179 83	
B. M. Thomas	73 02	
		252 85

Incidental expenses Indian service in Oregon, 1884:

To L. L. Baker		104 31
E. L. Bradley		81 77
H. N. Cook		16 80
H. B. Claflin		37 52
S. H. Crane		186 50
J. Dobson		708 00
W. Davis		198 85
W. W. Dodge		54 50
J. Godhelp		16 75
J. E. Gordon		107 89
A. Gesner		300 00
W. H. Hurlbut		22 50
Wood, Bonbright & Co		77 02
J. F. Harrison		72 67
G. T. Hawley		159 85
J. Haughn		200 00
J. C. Johnson		6 35
H. King		2 40
W. W. Montague		324 00
J. T. Merrill		75 31
J. H. McCann		45 70
Markley, Alling & Co		10 30
E. Naumburg		265 50
A. C. Nichols		12 09
L. M. Nickerson		100 00
C. Porter		378 00
R. A. Robbins		41 86
P. B. Sinnott		3,800 50
E. J. Sommerville		729 50
J. Smith		245 00
J. St. John		215 43
W. H. Schieffelin		347 25
Carried forward		8,944 12

Incidental expenses Indian service in Oregon, 1884—Continued.

Brought forward		$8,944 12
To Union Pacific R. R		54 00
F. M. Wadsworth		7,214 92
W. B. Wills		160 00
E. B. Woodworth		75 90
W. Whiteside		72 50
W. F. Whittier		14 40
W. J. Wiley		18 75
C. M. Yates		1 00
		16,555 59

Incidental expenses Indian service in Oregon, 1883:

To E. L. Bradley		736 45
J. Chambers		2 25
Central Pacific R. R		46 00
R. F. Hunter		400 00
S. King		16 00
Union Pacific R. R		54 50
F. M. Wadsworth		20 00
		1,275 20
Deduct repayments:		
By L. M. Nickerson	$124 50	
P. B. Smith	2 45	
E. A. Swan	342 85	
E. J. Sommerville	30 80	
J. Smith	90 00	
P. B. Sinnott	1 15	
F. M. Wadsworth	58 54	
		650 29
		624 91

Incidental expenses Indian service in Oregon, 1882:

By E. A. Swan	$79 55	

Incidental expenses Indian service in Oregon, 1881 and prior years:

By L. M. Nickerson	$7 00	

Incidental expenses Indian service in Oregon, 1881 and prior years (transfer account):

To Interior Department		231 30

Incidental expenses Indian service in Utah, 1884:

To J. B. Adams & Co		135 10
Max H. C. Brombacher		7 20
J. Chatillon & Son		10 50
S. Colgate		13 77
S. H. Crane		113 04
E. W. Davis		3,160 87
W. W. Davenport		1 84
A. Flagler		42
J. F. Gardner		1,296 11
J. F. Minniss		600 00
J. R. Michael		260 52
R. Murray		89 50
J. S. Page		3 15
C. Popper		384 99
R. A. Robbins		10 50
W. H. Schieffelin		117 73
H. C. Slavens		2,000 00
H. W. Shepard		91 00
D. Talmage		7 54
A. E. Whyland		4 45
H. C. Wells		151 80
J. H. Woodhouse		29 10
N. W. Wells		1,050 00
		9,539 13
Deduct repayment:		
By J. M. Minniss		89 15
		9,449 98

Incidental expenses Indian service in Utah, 1883:

To Union Pacific R. R		$60 50
Deduct from repayments:		
By J. J. Crichlow	$342 77	
J. F. Minniss	136 61	
		479 38
Excess of repayments		418 88

Incidental expenses Indian service in Utah, 1882:

By J. J. Critchlow	$299 40	

Incidental expenses Indian service in Washington, 1884:

To P. Buckley		637 14
L. L. Baker		148 92
W. Davis		309 36
W. W. Dodge		28 08
E. Eells		5,533 90
J. Esmond		112 50
D. F. Ferry & Co		34 99
J. E. Gordon		17 88
J. F. Harrison		14 00
G. T. Hawley		485 70
Indian Training School, Forest Grove, Oreg		270 00
W. A. Jones		13 88
J. C. Johnson		44 67
J. Linforth		22 40
R. H. Milroy		495 00
Markley, Ailing & Co		10 30
Studebaker Brothers Manufacturing Company		1 08
J. A. Simmes		850 00
W. H. Schieffelin		426 27
O. Wood		825 60
W. F. Whittier		4 20
S. D. Waters		3,496 00
C. Willoughby		250 00
		14,031 27
Deduct repayments:		
By P. Buckley	$42 34	
E. Eells	3 13	
J. A. Simms	73 00	
S. D. Waters	89 31	
O. Wood	128 24	
		336 02
		13,695 25

Incidental expenses Indian service in Washington, 1883:

To S. J. Johnson		40 00
C. Willoughby		10 50
		50 50
Deduct from repayments:		
By E. Eells	$1 14	
R. H. Milroy	28 85	
J. A. Simms	657 82	
		687 81
Excess of repayments		637 31

Incidental expenses Indian service in Washington, 1882:

To C. Willoughby		19 59

Incidental expenses Indian service in Washington, 1881 and prior years:

By J. H. Wilbur	$0 23	

Incidental expenses Indian service in Washington, 1881 and prior years (transfer account):

To R. H. Milroy		200 36
Carried forward		200 36

Incidental expenses Indian service in Washington, 1881 and prior years (transfer account)—Cont'd.		
Brought forward		$200 36
Deduct from repayments:		
By Interior Department	$429 40	
J. H. Wilbur	1 27	
C. Willoughby	65 34	
		496 01
Excess of repayments		295 65
Incidental expenses Indian service in Wyoming, 1884:		
To Green River and Fort Washington Stage Co., Wyoming		50 00
J. Irwin		200 00
S. R. Martin		350 00
		600 00
Deduct repayment:		
By J. Irwin		52 24
		547 76
Incidental expenses Indian service in Wyoming, 1883:		
By J. Irwin	$14 70	
Incidental expenses Indian service in Wyoming, 1882:		
By J. Irwin	$2 42	
Support of Apaches, Kiowas, and Comanches, 1884:		
To P. B. Hunt		7,700 00
W. C. Osburn		15,000 00
		22,700 00
Support of Apaches, Kiowas, and Comanches, 1883:		
By P. B. Hunt	$445 59	
Support of Apaches, Kiowas, and Comanches, 1882:		
To P. B. Hunt		1 50
Deduct from repayment:		
By P. B. Hunt		2 91
Excess of repayment		1 41
Support of Apaches, Kiowas, and Comanches, 1881 and prior years:		
By P. B. Hunt	$349 75	
Support of Apaches, Kiowas, and Comanches, 1881 and prior years (transfer account):		
By P. B. Hunt	$775 59	
Support of Apaches of Arizona and New Mexico, 1882:		
To M. W. Bremer		76 80
Deduct repayment:		
By W. H. H. Llewellyn		11 35
		65 45
Support of Apaches of Arizona and New Mexico, 1881:		
To H. W. Bremer		1,948 86
J. R. Cahill		431 00
J. R. Gilman		240 00
Lord & Williams		1,212 78
C. P. Schneider		1,680 67
J. W. Tuck		292 00
J. Thompson and Braughman,		712 06
		6,517 37
Support of Apaches of Arizona and New Mexico, 1881 and prior years:		
By J. M. Shaw		$240 96
Support of Apaches of Arizona and New Mexico, 1881 and prior years (transfer account):		
By B. M. Thomas		$3 53
Support of Apaches of Arizona and New Mexico, 1880 and prior years:		
To H. Duane		$200 00
W. Rosenthal		168 50
		368 50
Support of Arapahoes, Cheyennes, Apaches, Kiowas, Comanches, and Wichitas, 1884:		
To H. O. Armour		130 91
Dodge City Bridge Co., Kansas		77 40
D. B. Dyer		744 37
C. H. Deere		325 00
N. M. Evans & Co		4,750 00
G. V. Hecker & Co		50 00
P. B. Hunt		1,884 60
C. Hotz		70 00
H. C. Kelsey		1,790 34
P. C. Meehan		123 03
J. D. Miles		180 00
North River Sugar Refining Co		190 80
A. A. Newman		120 00
W. C. Oburn		330,045 91
W. H. Schieffelin		1,745 06
H. C. Slavens		31,964 00
C. W. Spicer		25 29
H. Wallach		8,377 69
		382,594 49
Deduct repayments:		
By P. B. Hunt	$271 34	
J. D. Miles	590 07	
		861 41
		381,733 08
Support of Arapahoes, Cheyennes, Apaches, Kiowas, Comanches, and Wichitas, 1883:		
To L. Candee		621 11
Indian Training School, Carlisle, Pa		80 00
W. C. Oburn		2,538 46
		3,239 57
Deduct repayments:		
By P. B. Hunt	$269 88	
J. D. Miles	549 17	
		819 05
		2,420 52
Support of Arapahoes, Cheyennes, Apaches, Kiowas, Comanches, and Wichitas, 1882:		
By P. B. Hunt	$55 50	
Support of Arapahoes, Cheyennes, Apaches, Kiowas, Comanches, and Wichitas, 1881 and prior years (transfer account):		
To P. B. Hunt		40
Support of Arickarees, Gros Ventres, and Mandans, 1884:		
To H. O. Armour		2,550 00
Adriance, Platt & Co		3 00
A. Corn		35 00
E. J. Chaffee		113 75
Carried forward		2,701 75

Support of Arickarees, Gros Ventres, and Mandans, 1884—Cont'd.		
Brought forward		$2,701 75
To H. B. Claflin		444 35
J. Chatillon & Son		12 12
S. Colgate		36 72
C. H. Castle		200 00
S. H. Crane		113 33
Carlisle Indian School		72 00
R. A. Dorman		69 00
J. Dobson		1,602 50
C. H. Deere		90 00
J. Early		17 00
A. Flagler		9 03
J. Godhelp		201 00
A. J. Gifford		2,544 48
M. H. Hurlbut		18 25
G. V. Hecker & Co		175 00
Hampton Normal and Agricultural Institute		241 50
Hood, Bonbright & Co		343 99
W. E. Hughes		9,760 32
J. Kauffman		5,275 06
H. C. Kelsey		55 68
J. S. Latimer		139 00
George R. Lockwood & Son		28 76
W. R. Merriam		2,316 87
P. C. Meehan		695 62
J. R. Michael		36 74
Markley, Alling & Co		66 75
R. Murray		20 70
North River Sugar Refining Company		1,090 80
E. Naumburg		1,591 60
G. Peters		45 75
T. C. Power		4,394 18
R. A. Robbins		242 18
W. H. Schieffelin		343 75
Studebaker Brothers' Manufacturing Company		245 00
J. St. Johns		230 00
F. L. Sommer		86 02
H. W. Shepard		51 00
H. H. Tobey		85 00
D. Treadway		143 50
W. E. Tefft		755 28
D. Talmage		33 48
W. Whiteside		351 35
W. A. Wood Mower and Reaping Machine Company		8 10
W. Wood		19 50
H. Wallach		729 40
J. H. Woodhouse		25 06
L. Wallace		48 00
A. E. Whyland		42 75
E. B. Woodworth		7 20
	37,856 42	
Deduct repayment:		
By J. Kauffman	505 11	
	37,351 31	
Support of Arickarees, Gros Ventres, and Mandans, 1883:		
To J. Kauffman	40 00	
Markley, Alling & Co	99 00	
	139 00	
Deduct from repayment:		
By J. Kauffman	809 38	
Excess of repayment	670 38	
Support of Arickarees, Gros Ventres, and Mandans, 1881 and prior years (transfer account):		
By J. Kauffman	$2 60	
Support of Assinaboines in Montana, 1884:		
To J. and B. Allen	58 75	
G. M. Acklin	27 00	
Carried forward	85 75	

Support of Assinaboines in Montana, 1884—Continued.		
Brought forward		$85 75
To E. J. Chaffee		95 31
E. F. Church		168 17
S. H. Crane		45 32
J. Dobson		2,956 50
D. M. Ferry & Co		2 85
Hampton Normal and Agricultural Institute		45 00
Hood, Bonbright & Co.		223 35
W. L. Lincoln		1,830 00
W. R. Merriam		50 00
P. C. Meehan		493 07
R. Murray		95
North River Sugar Refining Company		400 00
E. Naumburg		814 25
T. C. Power		6,928 63
R. A. Robbins		147 82
W. H. Schieffelin		118 13
F. L. Sommer		267 84
H. H. Tobey		85 00
H. C. Wells		33 00
W. Wood		26 00
H. Wallach		153 25
H. T. Wakemen		7 08
	14,977 27	
Deduct repayment:		
By W. L. Lincoln	132 13	
	14,845 14	
Support of Assinaboines in Montana, 1883:		
By W. L. Lincoln	$65 89	
Support of Blackfeet, Bloods, and Piegans, 1884:		
To H. O. Armour		1,020 00
T. A. Ashburner		15 86
J. and B. Allen		97 50
G. M. Acklin		9 00
R. A. Allen		3,150 00
W. T. Buckley		110 05
Max H. C. Brombacher		22 90
A. B. Cohn		12 00
E. J. Chaffee		220 00
E. F. Church		67 17
H. B. Claflin		141 38
J. Chatillon & Son		95
S. Colgate		137 70
S. H. Crane		220 46
C. H. Castle		447 50
Carlisle Indian School		72 57
J. Dobson		1,457 38
R. A. Dorman		46 00
W. W. Davenport		15 81
C. H. Deere		12 50
J. Early		9 86
A. Flagler		22 40
D. M. Ferry & Co		11 32
J. Godhelp		67 00
E. T. Howard		27 07
W. H. Hurlbut		55 95
B. Hansell		15 00
Hood, Bonbright & Co		300 52
Hampton Normal and Agricultural Institute		209 00
H. C. Kelsey		2 75
J. S. Latimer		278 00
G. R. Lockwood & Son		64 24
P. C. Meehan		977 30
R. Murray		9 06
J. R. Michael		102 47
F. MacVeagh		9 12
North River Sugar Refining Company		819 28
E. Naumburg		329 75
G. T. Newman		8,249 98
T. C. Power		10,792 27
G. F. Penfield		31 48
Carried forward		29,660 55

Support of Blackfeet, Bloods, and Piegans, 1884—Continued.		
Brought forward		$29,660 55
To G. Peters		40 50
R. A. Robbins		113 79
W. H. Schieffelin		90 25
J. M. Shaw		3 54
J. St. John		84 75
H. W. Shepard		7 10
W. E. Tefft		353 52
D. Tredway		17 50
D. Talmage		122 25
A. S. Whyland		50 55
H. Wallach		305 50
W. B. Wills		24 00
J. H. Woodhouse		17 25
W. Whiteside		145 00
H. T. Wakemen		6 60
J. Young		3,750 00
		34,792 65
Deduct repayment:		
By J. Young		728 02
		34,064 63
Support of Blackfeet, Bloods, and Piegans, 1883:		
To J. Young		325 00
Deduct from repayment:		
By J. Young		990 99
Excess of repayment		665 99
Support Cheyennes and Arapahoes, 1884:		
To D. B. Dyer		3,390 00
J. D. Miles		3,175 75
W. C. Oburn		14,000 00
		20,565 75
Support Cheyennes and Arapahoes, 1881 and prior years (transfer account):		
To Interior Department		751 01
Support of Chippewas of Lake Superior, 1884:		
To H. O. Armour		1,800 00
E. P. Allen		700 00
G. M. Acklin		5 40
W. T. Buckley		38 37
A. Barclay		1,834 00
E. F. Church		158 37
H. B. Claflin		83 88
C. H. Conover		29 40
S. H. Crane		619 18
C. H. Castle		238 50
Carlisle Indian School		14 50
R. A. Dorman		92 00
W. R. Durfee		5,280 18
C. H. Deere		15 00
J. Dobson		802 40
A. Flagler		62 37
G. T. Lane		20 50
J. S. Page		39 00
R. A. Robbins		363 66
W. H. Schieffelin		68 80
D. Tredway		18 20
H. C. Wells		132 00
W. Whiteside		390 91
J. H. Woodhouse		166 26
H. T. Wakemen		22 85
		12,995 73
Deduct repayment:		
By J. H. Woodhouse		4 25
		12,991 48
Support of Chippewas of Lake Superior, 1883:		
By W. R. Durfee	$202 31	
Support of Chippewas of Lake Superior, 1882:		
To D. M. Ferry & Co		$17 50
Support of Chippewas of Lake Superior, 1881 and prior years:		
By S. N. Clark	$301 00	
Support of Chippewas of the Mississippi, 1884:		
To G. M. Acklin		18 00
J. and B. Allen		14 50
Max H. C. Brombacher		2 20
A. Barclay		418 60
S. Colgate		29 38
H. B. Claflin		14 57
E. D. Cummings		1 96
C. H. Castle		50 25
A. Corn		2 10
E. J. Chaffee		40 83
S. H. Crane		38 69
Carlisle Indian School		8 64
R. A. Dorman		13 80
W. W. Davenport		11 51
J. Early		1 07
A. Flagler		05
J. Godhelp		5 03
W. H. Hurlbut		8 76
C. B. Hotchkiss		15 00
Hampton Normal and Agricultural Institute		3 89
G. V. Hecker & Co		5 00
Hood, Bonbright & Co		32 82
H. King		2 64
G. R. Lockwood & Son		34 82
C. P. Luse		2,219 90
L. H. Maxfield		168 00
P. C. Meehan		23 98
J. P. Michael		5 33
F. MacVeigh		2 25
R. Murray		1 15
North River Sugar Refining Company		54 54
E. Naumburg		44 90
G. F. Penfield		9 54
R. A. Robbins		99 68
E. H. Smith		15 17
J. St. John		36 24
J. M. Shaw		17 94
H. W. Shepard		6 73
H. H. Tobey		4 68
D. Tredway		28 49
D. Talmage		14 57
W. E. Tefft		77 91
A. E Whyland		61 02
W. Wood		6 24
J. H. Woodhouse		20 38
E. B. Woolworth		8 25
H. C. Wells		6 60
W. Whiteside		28 57
L. Wallace		1 25
H. T. Wakeman		2 25
W. B. Wills		76 80
		3,816 47
Support of Chippewas of the Mississippi, 1883:		
By C. P. Luse	$55 41	
Support of Chippewas of the Mississippi, 1882:		
By C. P. Luse	$14 95	
Support of Chippewas of the Mississippi, 1881 and prior years (transfer account):		
To Interior Department		375 43
Support of Chippewas, Pillagers, and Lake Winnebagoshish bands, 1884:		
To H. O. Armour		160 00
G. M. Acklin		10 80
Carried forward		170 80

Support of Chippewas, Pillagers, and Lake Winnebagoshish bands, 1884—Continued.

Brought forward		$170 80
To J. & B. Allen		3 63
Max H. C. Brombacher		1 05
A. Barclay		281 00
S. Colgate		18 36
H. B. Claflin		36 98
E. J. Chaffee		9 83
C. H. Castle		21 25
E. D. Comings		1 96
S. H. Crane		2 46
Carlisle Indian School		2 00
R. A. Dorman		11 50
W. W. Davenport		3 83
Hood, Bonbright & Co		36 63
H. King		44
C. P. Luse		1,345 00
G. R. Lockwood & Son		21 67
P. C. Meehan		12 62
J. R. Michael		1 92
F. Mac Veigh		3 04
North River Sugar Refining Company		54 54
E. Naumburg		89 80
G. F. Penfield		6 36
J. S. Page		6 30
R. A. Robbins		50 68
J. St. John		36 95
J. M. Shaw		41
H. H. Tobey		4 25
D. Talmage		5 14
D. Tredway		16 20
W. E. Tefft		50 98
W. Whiteside		28 25
H. T. Wakemen		1 10
W. B. Wills		30 40
A. E. Whyland		20 30
J. H. Woodhouse		14 21
		2,401 84

Support of Chippewas, Pillagers, and Lake Winnebagoshish bands, 1883:

By C. P. Luse	$232 04

Support of Chippewas of Red Lake and Pembina tribes of Chippewas:

To G. M. Acklin	14 40
A. Barclay	448 50
E. F. Church	35 34
S. Colgate	18 36
C. H. Conover	12 82
S. H. Crane	288 27
E. D. Comings	3 92
R. A. Dorman	80 50
J. Dobson	1,998 62
C. H. Deere	330 00
W. W. Davenport	4 28
Emerson, Smith & Co	110 00
A. Flagler	44 48
D. M. Ferry & Co	24 09
W. H. Hurlbut	4 38
M. Johnson	3,542 00
C. P. Luse	5,289 94
L. H. Maxfield	651 00
P. C. Meehan	12 52
R. Murray	24 00
A. Morrison	235 00
North River Sugar Refining Company	177 26
E. Naumburg	80 82
R. A. Robbins	270 99
E. H. Smith	7 61
W. H. Schieffelin	165 94
C. W. Spicer	25 28
D. Tredway	14 00
A. E. Whyland	67 85
A. E. Webster	1,012 00
W. Wood	3 12
Carried forward	14,997 29

Support of Chippewas of Red Lake and Pembina tribes of Chippewas—Continued.

Brought forward		$14,997 29
To J. H. Woodhouse		110 74
H. C. Wells		132 00
		15,240 03
Deduct repayment:		
By C. P. Luse		383 97
		14,856 06

Support of Chippewas of Red Lake and Pembina tribe of Chippewas, 1883:

By C. P. Luse	$319 97

Support of Chippewas of Red Lake and Pembina tribe of Chippewas, 1882:

By C. P. Luse	$29 10

Support of Chippewas of Red Lake and Pembina tribe of Chippewas, 1881 and prior years (transfer account):

By R. M. Pratt	$297 94

Support of Chippewas, Turtle Mountain band, 1884:

To H. O. Armour	850 00
J. W. Cramsie	4,678 00
S. H. Crane	124 77
H. B. Claflin	17 00
C. H. Castle	130 00
J. Chatillon & Sons	8 40
C. H. Deere	400 00
A. Flagler	63 16
C. W. Herendeen	85 00
J. L. Legare	576 00
R. Murray	40 00
H. W. Shepard	39 00
Studebaker Brothers Manufacturing Company	490 00
J. H. Woodhouse	10 10
H. C. Wells	52 80
	7,564 23

Support of Chippewas on White Earth Reservation, 1884:

To G. M. Acklin	9 00
A. Barclay	149 50
S. H. Crane	115 12
E. D. Comings	3 92
R. A. Dorman	69 00
C. H. Deere	90 00
D. M. Ferry & Co	52 97
B. Hansell	33 21
M. Johnson	1,232 00
C. P. Luse	4,826 60
L. H. Maxfield	210 00
R. Murray	26 42
North River Sugar Refining Company	54 54
R. A. Robbins	474 19
W. H. Schieffelin	259 72
J. H. Woodhouse	34 97
L. Wallace	4 80
E. A. Webster	276 00
H. T. Wakemen	48
	7,922 44

Support of Chippewas on White Earth Reservation, 1883:

To C. P. Luse	116 00
Deduct repayment:	
By C. P. Luse	85 89
	30 11

Support of confederated tribes and bands in Middle Oregon, 1884:		
To J. & B. Allen	$8 63	
L. L. Baker	274 79	
E. J. Chaffee	55 75	
H. B. Claflin	17 74	
S. H. Crane	35 30	
W. Davis	145 90	
W. W. Dodge	399 36	
J. E. Gordon	81 67	
A. Gessner	1,435 00	
Hood, Bonbright & Co	21 84	
J. F. Harrison	80 52	
G. T. Hawley	527 01	
J. C. Johnson	141 65	
Kelly, Maus & Co	39 40	
H. King	45 75	
J. Linforth	9 10	
W. W. Montague	6 95	
J. F. Merrill	60 25	
J. H. McCann	87 90	
A. C. Nichols	49 91	
R. A. Robbins	17 50	
J. Smith	2,515 00	
S. Seller	5 48	
R. W. Simpson	1 80	
J. St. John	.24 84	
W. H. Schieffelin	176 06	
Studebaker Brothers' Manufacturing Company	567 00	
H. H. Tobey	42 50	
W. B. Mills	40 00	
W. Whiteside	34 80	
W. F. Whitties	38 20	
W. J. Wiley	2 50	
C. M. Yates	11 98	
	7,002 08	
Deduct repayment:		
By J. Smith	32 59	
	6,969 49	
Support of confederated tribes and bands in Middle Oregon, 1883:		
To J. Smith	135 00	
Deduct from repayment:	426 71	
Excess of repayment	291 69	
Support of Crows, 1884:		
To H. O. Armour	2,550 00	
T. A. Ashburner	158 60	
H. J. Armstrong	12,046 76	
G. M. Acklin	30 40	
W. T. Buckley	164 16	
Max H. C. Brombacher	19 20	
E. J. Chaffee	742 00	
E. F. Church	333 24	
H. B. Claflin	141 38	
S. H. Crane	103 50	
C. H. Castle	65 00	
Carlisle Indian School	51 60	
J. Dobson	4,911 75	
W. W. Davenport	6 42	
D. M. Ferry & Co	110 50	
J. Godhelp	335 00	
G. G. Hallett	70 50	
G. V. Hecker & Co	500 00	
W. H. Hurlbut	149 00	
Hood, Bonbright & Co	1,296 41	
Kelly, Maus & Co	7 20	
G. T. Lane	85 00	
J. S. Latimer	69 50	
G. R. Lockwood & Son	15 15	
Markley, Alling & Co	52 00	
J. R. Michael	602 44	
F. MacVeigh	4 50	
J. F. B. Marshall	90 00	
R. Murray	46 00	
G. R. Milburn	9,000 00	
Carried forward	33,757 21	

Support of Crows, 1884—Continued.		
Brought forward	$33,757 21	
To North River Sugar Refining Company	1,817 18	
G. T. Newman	22,550 58	
E. Naumburg	89 80	
G. F. Penfield	125 93	
T. C. Power	10,211 04	
R. A. Robbins	8 30	
W. H. Schieffelin	166 14	
J. St. John	338 20	
H. W. Shepard	256 80	
H. H. Tobey	85 00	
D. Tredway	85 81	
D. Talmage	254 84	
H. C. Wells	264 00	
J. H. Woodhouse	118 36	
W. Wood	5 20	
H. Wallach	3,622 50	
E. Wise	107 10	
E. B. Woolworth	4 50	
W. B. Wills	230 00	
W. Whiteside	557 64	
L. Wallace	3 13	
	74,659 26	
Deduct repayments:		
By E. J. Chaffee $2 96		
H. J. Armstrong 712 71		
	715 67	
	73,943 59	
Support of Crows, 1883:		
By H. J. Armstrong	$432 87	
Support of Crows, 1882:		
By H. J. Armstrong	$22 82	
Support of Crows, 1881 and prior years:		
By L. H. Carpenter	$307 97	
Support of Crows, 1881 and prior years (transfer account):		
By L. H. Carpenter	$345 26	
Support of D'Wamish and other allied tribes in Washington, 1884:		
To P. Buckley	4,302 33	
L. L. Baker	293 74	
J. Dobson	236 00	
W. Davis	1 04	
W. W. Dodge	252 73	
W. Farell	85 50	
J. E. Gordon	149 06	
Hood, Bonbright & Co	57 00	
J. F. Harrison	53 10	
G. T. Hawley	485 50	
W. A. Jones	50 00	
J. Linforth	51 00	
J. R. Michael	48	
W. W. Montague	3 75	
J. F. Merrill	94 65	
J. H. McCann	112 77	
R. A. Robbin	66	
S. Seller	110 98	
R. W. Simpson	21 05	
J. St. John	37 00	
W. H. Schieffelin	161 62	
W. J. Wiley	255 06	
W. B. Wills	60 00	
W. Whiteside	87 00	
W. F. Whittier	49 60	
C. M. Yates	11 00	
	7,022 62	
Deduct repayment:		
By P. Buckley	50	
	7,022 12	

Support of Dwamish and other allied tribes in Washington, 1883:		
To J. B. A. Brouillet		$3,422 84
Deduct repayment:		
By E. Eells		462 14
		2,960 07
Support of Dwamish and other allied tribes in Washington, 1881 and prior years:		
By J. O'Kane	$10 00	
Support of Flatheads and other confederated tribes, 1881:		
To H. O. Armour	255 00	
G. M. Acklin	18 00	
C. W. Barstow	3 25	
Baltimore and Ohio R. R. Co.	456 90	
W. T. Buckley	165 14	
A. B. Cohn	6 00	
E. J. Chaffee	24 90	
E. F. Church	32 33	
H. B. Claflin	61 16	
S. Colgate	45 90	
J. Culbert	28 25	
S. H. Crane	289 52	
C. H. Castle	45 00	
J. Dobson	771 75	
R. A. Dorman	46 00	
C. H. Deere	205 00	
J. Early	2 73	
Eiseman Brothers	186 50	
A. Flagler	17 31	
Flagler, Forsyth & Bradley	10 23	
J. W. French	400 00	
J. Godhelp	33 50	
G. V. Hecker & Co	25 00	
W. H. Hurlbut	27 00	
B. Hansell	7 22	
Hood, Bonbright & Co	55 93	
Kelly, Maus & Co	3 00	
H. King	36 50	
P. C. Meehan	74 57	
Markley, Alling & Co	5 10	
R. Murray	25 63	
J. R. Michael	30 00	
F. MacVeigh	15 20	
North River Sugar Refining Company	231 79	
E. Naumburg	222 60	
G. Peters	360 00	
J. S. Page	6 30	
T. C. Power	1,576 70	
P. Ronan	5,370 00	
R. A. Robbins	142 45	
W. H. Schieffelin	161 52	
J. M. Shaw	8 80	
J. St. John	97 08	
D. Talmage	25 70	
F. H. Tuthill	12 90	
W. E. Tefft	29 46	
E. A. Webster	850 00	
H. C. Wells	66 00	
H. Wallach	98 50	
W. B. Wills	43 20	
W. Whiteside	217 50	
H. T. Wakeman	50	
Watson & Bartholow	17 41	
		12,947 93
Support of Flatheads and other confederated tribes, 1883:		
By P. Ronan	$123 17	
Support of Gros Ventres in Montana, 1884:		
To H. O. Armour	637 50	
J. & B. Allen	50 00	
Max H. C. Brombacher	29 45	
A. Corn	140 00	
E J. Chaffee	95 32	
Carried forward		952 27

Support of Gros Ventres in Montana, 1884—Continued.		
Brought forward		$952 27
To E. F. Church		168 17
H. B. Claflin		40 00
S. H. Crane		45 32
Carlisle Indian School		75 72
J. Dobson		1,681 50
A. Flagler		14 39
Hood, Bonbright & Co		223 35
Kelly, Maus & Co		61 78
W. L. Lincoln		2,994 00
W. R. Merriam		51 25
P. C. Meehan		493 07
North River Sugar Refining Company		418 10
E. Naumburg		814 25
T. C. Power		8,744 49
J. S. Page		5 40
R. A. Robbins		147 82
W. H. Schieffelin		118 12
J. St. John		263 00
H. H. Tobey		85 00
D. Tredway		245 00
A. E. Whyland		37 13
H. C. Wells		33 00
W. Wood		26 00
H. Wallach		153 25
J. H. Woodhouse		47 00
H. T. Wakeman		15 60
W. B. Wills		290 00
		18,243 98
Deduct repayment:		
By W. L. Lincoln		268 47
		17,975 51
Support of Gros Ventres in Montana, 1883:		
To T. C. Power		1,546 77
Deduct repayment:		
By W. L. Lincoln		151 30
		1,395 47
Support of Indians in Arizona and New Mexico, 1884:		
To G. M. Acklin		43 20
American Bell Telephone Company		123 50
Max H. C. Brombacher		138 50
Baltimore and Ohio R. R.		182 00
A. Corn		8 75
J. W. Clark		500 00
A. J. Cum Iffe		22,050 88
H. B. Claflin		455 45
E. F. Church		67 00
S. Colgate		780 30
E. J. Chaffee		756 23
S. H. Crane		582 38
Carlisle Indian School		98 00
R. A. Dorman		23 00
H. B. Denman		73,412 74
J. Dobson		9,196 63
C. H. Deere		207 50
H. T. Disbrow		7 30
W. W. Davenport		14 81
J. Early		42 50
A. Flagler		32 98
D. M. Ferry & Co		47 44
J. Godhelp		234 50
Gould Manufacturing Company, Seneca Falls, N. Y		164 50
H. C. Hooker		21,989 00
W. H. Hurlbut		508 70
C. B. Hotchkiss		6 20
G. V. Hecker & Co		1,750 00
B. Hansell		4 20
Hampton Normal and Agricultural Institute		256 75
Hood, Bonbright & Co		48 70
I. Hamburger & Son		149 87
Carried forward		133,883 51

Support of Indians in Arizona and New Mexico, 1884—Continued.		
Brought forward		$133,883 51
To Interior Department		1,257 41
H. King		70 80
H. C. Kelsey		68 94
Kelly, Maus & Co		3 42
W. H. H. Llewellyn		19,947 43
J. S. Latimer		556 00
G. T. Lane		222 65
G. R. Lockwood & Son		162 37
P. C. Meehan		3,693 48
J. R. Michael		1,750 92
F. MacVeigh		13 35
R. Murray		293 10
Markley, Alling & Co		411 80
North River Sugar Refining Company		6,326 65
E. Naumburg		372 20
G. T. Newman		5,100 00
G. Peters		913 00
G. F. Penfield		190 80
J. S. Page		9 09
T. C. Power		1,811 07
N. Reymond		750 75
R. A. Robbins		257 32
A. H. Riley		12,842 50
Z. Staub		7,854 91
W. H. Schieffelin		460 56
J. M. Shaw		12 94
H. W. Shepard		678 88
J. St. John		1,512 38
L. Spiegelberg		332 28
Studebaker Brothers Manufacturing Company		830 00
D. Talmage		255 74
W. E. Tefft		1,197 28
G. F. Timms		149 94
H. H. Tobey		255 00
W. Whiteside		300 00
W. Wood		13 00
W. J. Wiley		2,774 40
P. P. Wilcox		11,123 69
A. E. Whyland		45,773 48
J. H. Woodhouse		390 67
H. C. Wells		396 00
H. Wallach		5,470 00
E. B. Woolworth		12 75
W. B. Wills		2,250 00
D. N. Walford		40 00
L. Wallace		4 00
H. T. Wakeman		43 51
		273,039 97
Deduct repayments:		
By P. P. Wilcox	$174 76	
W. H. H. Llewellyn	64 97	
		239 73
		272,800 24
Support of Indians of Central Superintendency, 1884:		
To H. O. Armour		180 00
G. M. Acklin		19 80
C. W. Barstow		8 13
J. V. Carter		1,212 50
S. Colgate		18 36
C. H. Castle		8 50
E. F. Church		33 50
C. H. Conover		92
E. J. Chaffee		18 00
S. H. Crane		384 38
J. Chatillon & Sons		1 62
Carlisle Indian School		13 69
D. B. Dyer		4,624 17
W. W. Davenport		6 93
H. T. Disbrow		5 72
J. Early		85
A. Flagler		47 18
Flagler, Forsyth & Bradley		67 21
B. Hansell		5 78
G. V. Hecker & Co		22 50
Carried forward		6,679 74

Support of Indians of Central Superintendency, 1884—Continued.		
Brought forward		$6,679 74
To Hood, Bonbright & Co		95 45
Kelly, Maus & Co		10 40
H. King		47 30
J. S. Latimer		27 80
G. R. Lockwood & Son		25 82
G. T. Lane		3 60
P. C. Meehan		12 33
R. Murray		22 82
J. R. Michael		1 60
J. G. McGammon		516 00
Markley, Alling & Co		10 00
North River Sugar Refining Company		327 24
W. C. Oburn		245 06
G. Peters		4 75
J. S. Page		54 75
G. F. Penfield		1 11
R. A. Robbins		387 39
W. H. Schieffelin		292 27
H. C. Slavens		12 85
J. W. Scott		1,575 00
D. Tredway		27 65
W. E. Tefft		46 36
I. A. Taylor		2,280 00
A. E. Whyland		42 45
J. H. Woodhouse		69 02
L. E. Woodin		525 00
W. B. Wills		208 00
H. T. Wakeman		12 97
H. C. Wells		6 60
A. A. Whiting		125 00
		13,696 33
Deduct repayments:		
By J. V. Carter	$147 08	
D. B. Dyer	38 01	
		185 09
		13,511 24
Support of Indians of Central Superintendency, 1883:		
To H. W. Denman		123 75
Deduct from repayments:		
By S. V. Carter	$164 97	
D. B. Dyer	25	
		165 22
Excess of repayments		41 47
Support of Indians of Central Superintendency, 1882 (transfer account):		
By D. B. Dyer	$6 00	
Support of Indians of Central Superintendency, 1881 and prior years (transfer account):		
To D. B. Dyer		6 00
Interior Department		168 74
		174 74
Support of Indians of Fort Hall Reservation, 1884:		
To G. M. Acklin		9 00
Max H. C. Brombacher		23 72
A. B. Cohn		45 00
E. J. Chaffee		243 55
S. Colgate		113 83
C. H. Conover		7 17
C. H. Castle		81 00
S. H. Crane		283 25
A. L. Cook		300 00
Carlisle Indian School		78 91
J. Dobson		1,323 81
W. W. Davenport		5 07
C. H. Deere		65 00
R. A. Dorman		4 60
J. Early		8 50
Carried forward		2,592 41

Support of Indians of Fort Hall Reservation, 1884—Continued.		
Brought forward		$2,592 41
To A. Flagler		30 41
D. M. Ferry & Co		24 13
G. V. Hecker & Co		175 00
H. C. Kelsey		69 60
Kelly, Maus & Co		15 00
H. King		5 28
G. T. Lane		36 00
P. C. Meehan		590 75
F. MacVeigh		7 60
J. R. Michael		317 86
R. Murray		46 86
North River Sugar Refining Company		913 55
G. T. Newman		10,602 70
G. Peters		85 25
J. S. Page		24 70
C. Popper		100 00
G. F. Penfield		15 71
R. A. Robbins		248 33
J. M. Shaw		5 50
W. H. Schieffelin		170 46
H. W. Shepard		62 04
D. Talmage		22 50
D. Tredway		23 33
A. E. Whyland		38 29
H. C. Wells		99 00
J. H. Woodhouse		131 49
E. A. Webster		136 50
L. Wallace		1 60
N. W. Wells		3,244 02
H. Wallach		83 00
H. T. Wakemen		24 55
		19,943 42
Deduct repayments:		
By A. L. Cook	$262 42	
Interior Department	1,968 22	
		2,230 64
		17,712 78
Support of Indians of Fort Hall Reservation, 1883:		
To C. H. Castle		130 20
A. L. Cook		227 00
Interior Department		25 30
J. W. L. Slavens		983 76
		1,366 26
Deduct repayment:		
By A. L. Cook		188 05
		1,178 21
Support of Indians at Fort Peck Agency, 1884:		
To H. O. Armour		2,550 00
G. M. Acklin		28 60
J. and B. Allen		125 00
W. T. Buckley		383 01
C. W. Barstow		5 75
Max H. C. Brombacher		3 40
A. Corn		35 00
E. J. Chaffee		214 25
J. Culbert		11 30
E. F. Church		334 91
H. B. Claflin		299 04
Indian Carlisle School		47 94
S. Colgate		183 60
C. C. Conover		8 07
C. H. Castle		171 75
S. H. Crane		1,058 32
J. Dobson		2,433 75
R. Dorman		46 00
H. T. Disbrow		32 85
C. H. Deere		75 00
J. Early		13 12
D. M. Ferry & Co		87 30
A. Flagler		122 22
Carried forward		8,270 18

Support of Indians at Fort Peck Agency, 1884—Continued.		
Brought forward		$8,270 18
To Flagler, Forsyth & Bradley		43 75
J. Godhelp		234 50
W. H. Hurlbut		153 25
G. V. Hecker & Co		50 00
Hampton Normal and Agricultural Institute		5 20
C. B. Hotchkiss		9 55
Hood, Bonbright & Co		771 75
B. Hansell		34 25
H. King		7 55
Kelley, Maus & Co		33 26
J. S. Latimer		139 00
G. T. Lane		16 16
W. R. Merriam		506 25
P. C. Meehan		980 32
J. R. Michael		120 98
R. Murray		113 23
F. MacVeigh		31 50
Markley, Alling & Co		15 00
North River Sugar Refining Company		1,814 72
E. Naumburg		2,421 20
G. Peters		217 95
T. C. Power		31,424 29
J. S. Page		37 55
R. A. Robbins		750 27
W. H. Schieffelin		43 35
S. E. Snider		14,539 85
J. M. Shaw		23 14
J. St. John		298 45
F. L. Sommer		194 71
H. W. Shepard		135 70
J. F. Sullivan		60 00
W. E. Tefft		612 89
D. Tredway		605 04
D. Talmage		196 96
A. E. Whyland		67 46
E. A. Webster		435 00
W. Whiteside		283 36
H. C. Wells		158 40
W. Wood		26 00
H. Wallach		2,728 90
L. Wallace		160 00
J. H. Woodhouse		178 85
W. B. Wills		205 00
H. T. Wakeman		79 34
		69,234 06
Deduct repayment:		
By S. E. Snider		762 34
		68,471 72
Support of Indians at Fort Peck Agency, 1883:		
To C. Aubrey		391 88
Leighton, Jordan & Henderson		975 00
S. E. Snider		2,219 16
		3,586 04
Deduct repayments:		
By Interior Department	$25 30	
N. S. Porter	163 13	
		188 43
		3,397 61
Support of Indians in Idaho, 1882:		
By Interior Department	$41 50	
Support of Indians in Klamath Agency, 1884:		
To L. L. Baker		126 47
J. Dobson		28 32
W. Davis		9 00
J. E. Gordon		37 57
T. R. Hayes		9 00
J. F. Harrison		101 50
G. T. Hawley		81 74
Carried forward		303 60

Support of Indians in Klamath Agency, 1884—Continued.		
Brought forward		$393 60
To R. F. Hunter		60 00
J. C. Johnson		46 53
J. Linforth		37 50
T. Martin		450 00
L. M. Nickerson		3,711 92
Studebaker Brothers' Manufacturing Company		2 00
W. H. Schieffelin		328 91
O. A. Stearnes		432 00
H. H. Tobey		4 25
W. Whiteside		72 50
W. F. Whittier		2 10
W. J. Wiley		277 50
C. M. Yates		16 00
		5,834 81
Support of Indians in Klamath Agency, 1883:		
By L. M. Nickerson	$0 99	
Support of Indians, Lemhi Agency, 1884:		
To H. O. Armour		255 00
G. M. Acklin		11 16
J. and B. Allen		21 75
C. W. Barstow		3 25
Max H. C. Brombacher		21 43
A. B. Cohn		11 50
A. Corn		8 75
H. B. Claflin		169 40
S. Colgate		22 95
C. H. Conover		6 33
S. H. Crane		328 20
Carlisle Indian School		41 34
E. F. Church		67 60
E. J. Chaffee		134 93
R. A. Dorman		35 88
J. Dobson		1,276 44
W. W. Davenport		17 80
J. Early		61
A. Flagler		34 19
J. Glendenning		1,949 53
J. Godhelp		67 00
W. H. Hurlbut		26 88
J. Harries		4,625 00
G. V. Hecker & Co		125 00
B. Hansell		15 45
Hampton Normal and Agricultural Institute		1 18
Hood, Bonbright & Co		146 04
H. King		25 32
H. C. Kelsey		139 75
Kelley, Maus & Co		31 31
J. S. Latimer		34 75
G. T. Lane		23 05
P. C. Mehan		124 87
J. R. Michael		86 47
F. MacVeigh		10 07
R. Murray		75 17
North River Sugar Refining Company		272 70
G. T. Newman		5,607 87
E. Naumberg		234 55
G. Peters		39 15
G. F. Penfield		15 71
J. S. Page		20 25
R. A. Robbins		228 66
J. M. Shaw		12 44
H. W. Shepard		65 20
J. St. John		23 25
W. H. Schieffelin		142 65
D. Tredway		31 85
W. E. Tefft		113 58
D. Talmage		49 70
H. H. Tobey		42 50
A. E. Whyland		51 72
E. A. Webster		150 30
H. C. Wells		66 00
Carried forward		17,143 43

Support of Indians, Lemhi Agency, 1884—Continued.		
Brought forward		$17,143 43
To W. Wood		6 50
H. Wallach		456 53
W. Whiteside		82 25
W. B. Wills		80 00
J. H. Woodhouse		27 68
H. T. Wakeman		28 88
L. Wallace		3 13
		17,828 40
Deduct repayment:		
By J. Harris		179 54
		17,648 86
Support of Indians of Lemhi Agency, 1883:		
To J. Barrack		1,037 97
Deduct repayment:		
By J. Harris		220 74
		817 23
Support of Indians, San Carlos Reservation, 1883:		
To H. B. Denman		31,467 55
N. Reymond		148 85
		31,616 40
Deduct repayments:		
By Interior Department.	$132 55	
P. P. Wilcox	834 94	
		967 49
		30,648 91
Support of Indian schools, 1884:		
To H. O. Armour		989 51
T. A. Ashburner		71 37
E. P. Allen		3,651 30
D. P. Andrews		4,263 30
G. M. Acklin		433 36
J. and B. Allen		230 71
S. C. Armstrong		323 15
H. J. Armstrong		815 00
R. A. Allen		755 00
C. W. Barstow		78
C. G. Belknap		495 00
Max H. C. Brombacher		45 08
W. T. Buckley		16 33
A. Barclay		1,653 60
J. B. A. Brouillet		5,894 50
L. L. Baker		254 80
H. W. Bushong		292 00
Bureau of Catholic Indian Missions		12,353 49
Baltimore and Ohio Railroad		296 25
F. Barteldes & Co		90 70
A. Corn		92 75
J. V. Carter		3,474 71
A. B. Cohn		47 01
E. J. Chaffee		1,665 20
J. Culbert		283 07
E. F. Church		3,089 33
J. M. Craig		16 00
J. W. Clark		4,740 26
A. L. Cook		1,229 40
S. H. Crane		1,849 71
H. B. Claflin		1,712 62
S. Colgate		951 96
C. H. Castle		292 00
C. H. Conover		8 28
J. Chatillon & Sons		25
E. D. Comings		3 92
J. W. Cramsie		2,200 00
Carlisle Indian School		273 01
J. Dobson		5,058 98
R. A. Dorman		192 05
W. R. Durfee		2,087 30
Carried forward		62,193 04

Support of Indian schools, 1884—Continued.	
Brought forward	$62,193 04
To W. W. Davenport	639 35
C. H. Deere	77 75
D. B. Dyer	10,978 51
W. Davis	1,027 79
M. Drake	132 00
W. W. Dodge	4,142 70
G. L. Davenport	190 00
E. W. Dennison	15 00
J. Early	59 02
Eells	11,580 00
Flagler	76 13
Flagler, Forsyth & Bradley	10 70
D. M. Ferry & Co	246 08
Fairbanks & Co	280 50
W. Farell	2,433 01
J. Godhelp	379 56
A. J. Gifford	947 50
J. E. Gordon	35 66
Mary B. Geboe	44 40
Nancy Geboe	32 40
E. Griswold	1,227 97
A. Gray	712 00
J. J. Gravault	63 81
A. Gesner	1,956 67
E. T. Howard	324 89
G. V. Hecker & Co	435 00
W. H. Hurlbut	733 42
P. B. Hunt	8,695 .0
Hampton Normal and Agricultural Institute	403 64
B. Hansell	20 78
Hubbell Stove Company	189 00
C. B. Hotchkiss	15 00
Hartford Woven Wire Mattress Company	110 65
Haskell & Wood	175 00
T. R. Hayes	2 33
Hood, Bonbright & Co	2,833 91
J. F. Harrison	418 60
G. T. Hawley	412 63
E. W. Henderson	8 50
H. G. Haas	1,251 60
R. F. Hunter	620 00
S. S. Hanry	31 58
Interior Department	462 86
A. H. Jackson	3,789 30
H. A. Jones	577 56
J. C. Johnson	5 34
C. S. Jones	1,250 00
John Van Range Company	642 00
H. C. Kelsey	292 24
H. King	7 00
H. Kendall	10,575 04
Killenot	40 05
J. Kaufman	2,144 88
F. E. Kohler	16 75
J. S. Latimer	1,038 33
G. R Lockwood & Son	4,487 94
J. Linforth	17 92
G. T. Lane	12 89
W. L. Lincoln	450 00
C. P. Luse	2,020 10
J. C. Lowrie	1,206 56
W. H. H. Llewellyn	41 00
H. C. Linn	3,504 40
P. Lafelire	51 60
M. L. Leonard	16 40
W. R. Merriam	202 50
P. C. Meehan	1,254 40
J. M. McMaster	2,580 00
R. H. Milroy	2,020 00
L. H. Maxfield	546 00
J. D. Miles	5,327 64
A. Miller	65 70
V. T. McGillycuddy	2,578 10
R. Murray	30 64
C. E. Monteith	6,121 70
J. S. Mayhugh	797 00
J. R. Michael	387 21
W. W. Montague	58 93
Carried forward	170,783 06

Support of Indian schools, 1884—Continued.	
Brought forward	$170,783 06
To F. MacVeigh	168 30
J. G. McCallum	3,827 35
J. F. Merrill	330 78
J. H. McCann	46 72
T. Martin	900 00
C. McKerne	7 00
J. G. McGammon	39 20
R. H. Milroy	2,302 40
Markley, Alling & Co	877 25
Julia E. Mallory	130 44
J. Marvin	14,838 61
J. F. Malo	300 00
North River Sugar Refining Company	2,263 41
E. Naumburg	9,383 13
L. M. Nickerson	4,977 39
A. C. Nichols	24 56
G. Peters	117 80
C. Porter	984 75
G. F. Penfield	498 46
J. S. Page	314 52
T. Pedro	350 00
J. M. Phillips	1,500 00
R. A. Robbins	4,111 91
D. M. Riordan	2,888 74
W. M. Ridpath	4,715 78
W. W. Ryer	361 34
T. F. Richardvill	34 40
P. Sanchez	2,212 00
E. H. Smith	136 26
S. E. Snider	3,602 99
J. M. Shaw	464 95
Studebaker Brothers' Manufacturing Company	49 00
J. St. John	2,669 78
F. L. Sommer	4 30
J. Smith	2,076 30
H. C. Slavens	4,395 31
E. J. Somerville	5,626 68
H. B. Sheldon	1,360 00
H. W. Shepard	95 49
J. F. Sullivan	67 20
S. Seller	232 44
C. B. Stone	330 40
R. W. Simpson	78 03
State Line Milling Company	800 00
L. Spiegelberg	670 37
Z. Staab	158 30
J. W. Scott	4,689 75
Smith Davis Manufacturing Company	1,897 00
W. H. Schieffelin	2 40
W. A. Swan	250 00
Mary Shapp	4 00
J. Sharkey	20 80
Symonds	38 77
D. Tredway	1,929 38
H. H. Tobey	425 00
W. E. Tefft	2,693 51
Trastum	30 30
D. Talmage	418 22
I. A. Taylor	3,377 64
F. H. Tuthill	3 23
A. Thomas	661 11
B. W. Thompson	5,887 35
A. E. Whyland	1,954 41
W. Whiteside	2,362 62
E. A. Webster	42 50
H. C. Wells	29 70
J. H. Woodhouse	2,949 07
W. Wood	146 12
H. Wallach	3,512 59
L. E. Woodin	1,177 50
L. Wallace	50 32
W. B. Mills	2,796 20
E. Wise	1,606 50
W. J. Wiley	724 90
E. B. Woodworth	239 20
G. W. Wilkinson	6,387 85
O. Wood	4,503 94
Carried forward	302,918 98

Support of Indian schools, 1884—Continued.

Brought forward		$302,918 98
To H. T. Wakeman		115 08
W. FhWhittier		170 45
F. M. Wadsworth		3,459 32
Wrought Iron Range Co		112 00
Watson & Bartholow		335 77
P. P. Wilcox		100 00
C. Willoughby		1,425 00
E. Willis		75 00
J. Wiswell & Co		173 60
C. M. Yates		106 58
L. Zeckendorf		53 25
Zimmerman Fruit Dryer Co.		75 00
		309,120 03
Deduct repayments:		
To C. G. Belknap	$57 75	
J. V. Carter	164 16	
D. B. Dyer	59 98	
E. Eells	153 74	
V. T. McGillycuddy	98 29	
L. M. Zickerson	207 60	
W. M. Ridpath	799 73	
J. W. Scott	274 75	
J. W. Thompson	52 40	
L. E. Woodin	39 87	
		1,908 27
		307,211 76

Support of Indian schools near Arkansas City, 1884:

To J. and B. Allen	36 75
H. O. Armour	79 28
G. M. Acklin	20 95
Max H. C. Brombacher	92
E. J. Chaffee	82 18
H. B. Claflin	194 08
E. F. Church	100 83
Carlisle Indian School	113 85
A. Caldwell	43 25
J. Dobson	649 00
R. A. Dorman	46 00
W. W. Davenport	60
J. Early	3 69
W. H. Hurlbut	59 00
Hood, Bonbright & Co	158 40
G. V. Hecker & Co	25 00
W. J. Hadley	13,390 79
Interior Department	22 76
J. S. Latimer	166 80
J. R. Michael	48 66
P. C. Meehan	99 14
R. Murray	5 15
F. McVeagh	8 40
E. Naumburg	1,001 77
G. F. Penfield	19 08
R. A. Robbins	169 83
J. St. John	339 93
E. H. Smith	77 74
W. H. Schieffelin	1 20
H. C. Slavens	60 50
Smith Davis Manufacturing Company	1,125 00
W. E. Tefft	131 12
D. Talmage	12 47
H. H. Tobey	25 50
D. Tredway	79 76
H. Wallach	360 00
W. Whittside	312 28
W. B. Wills	170 00
W. Wood	19 50
H. T. Wakeman	10 35
Wrought-Iron Range Co	309 00
H. C. Wells	6 60
E. Wise	178 50
J. H. Woodhouse	47 28
A. E. Whyland	187 11
	20,000 00

Support of Indian school at Carlisle, Pa., 1884:

To G. M. Acklin	$193 40
J. and B. Allen	95 25
A. B. Cohn	11 00
E. F. Church	334 94
S. H. Crane	1,227 41
H. B. Claflin	476 82
S. Colgate	229 50
E. J. Chaffee	76 88
C. H. Conover	25 61
J. Chatillon & Sons	12 52
Carlisle Herald Printing Company	5 28
R. A. Dorman	161 00
W. W. Davenport	28 67
J. Dobson	708 00
G. Ensminger	392 55
J. Early	6 16
A. Flagler	57 82
W. H. Hurlbut	118 00
B. Hansell	18 65
Hood, Bonbright & Co	271 57
Interior Department	122 75
H. King	20 00
G. T. Lane	3 60
G. R. Lockwood & Son	338 21
C. McKeone	14 00
P. Meehan	323 92
J. R. Michael	98 00
F. MacVeagh	21 90
R. Murray	15 49
North River Sugar Refining Company	913 55
E. Naumburg	290 40
J. S. Page	94 10
G. Peters	203 20
R. H. Pratt	63,347 21
R. A. Robbins	3,674 63
Studebaker Brothers' Manufacturing Company	7 20
E. H. Smith	87 00
J. M. Shaw	30 65
H. Saxton & Co	126 99
W. H. Schieffelin	192 10
J. St. John	826 80
Smith Davis Manufacturing Company	216 00
W. E. Tefft	285 48
D. Talmage	200 10
H. H. Toby	85 00
F. H. Tuthill	114 00
A. Thomas	1,828 18
A. E. Whyland	433 71
J. H. Woodhouse	1,005 35
L. Wallace	19 55
H. T. Wakeman	96 30
	79,486 40
Deduct repayments:	
By Carlisle Indian School	$10,037 08
Interior Department	949 32
	10,986 40
	68,500 00

Support of Indian school at Carlisle, Pa., 1883:

To R. H. Pratt	80 00
Deduct repayment:	
By Carliste Indian School	80 00

Support of Indian school at Forest Grove, Oreg., 1884:

To L. L. Baker	148 04
E. F. Church	69 18
H. B. Claflin	156 15
C. H. Castle	43 50
J. Culbert	56 50
E. J. Chaffee	309 38
S. H. Crane	7 15
Carried forward	789 90

Support of Indian school at Forest Grove, Oreg., 1884—Continued.		
Brought forward		$789 90
To J. Dobson		708 00
W. Davis		223 97
W. W. Dodge		1,330 48
A. Flagler		1 60
W. Farell		329 50
J. E. Gordon		124 67
T. R. Hayes		24 00
Hood, Bonbright & Co		115 00
J. F. Harrison		118 07
G. T. Hawley		227 11
W. A. Jones		106 50
J. C. Johnson		118 96
Kelley, Maus & Co		113 25
H. King		167 25
J. S. Latimer		34 75
J. Linforth		11 65
G. R. Lockwood & Son		196 68
H. J. Minthorn		23,159 16
J. R. Michael		26 64
W. W. Montague		3 75
J. F. Merrill		58 74
J. H. McCann		141 22
A. C. Nichols		226 39
R. A. Robbins		54 36
Studebaker Brothers' Manufacturing Company		18 00
S. Seller		83 00
R. W. Simpson		59 35
W. H. Schieffelin		86 86
W. E. Tefft		398 17
H. H. Tobey		42 50
A. Thomas		455 00
W. J. Wiley		251 68
J. H. Woodhouse		22 55
W. F. Whittier		109 06
C. M. Yates		62 23
	30,000 00	
Deduct repayment:		
By Indian training school, Forest Grove, Oreg	270 00	
	29,730 00	
Support of Indian school at Forest Grove, Oreg., 1883:		
To J. G. Boos		328 42
W. Bowlby		23 10
T. Collison		1,712 78
J. R. Gill & Co		15 00
H. Haugg		849 57
C. G. Hickvale		171 05
W. D. Hoxter		1,812 09
S. Hughes		46 55
S. Lipman & Co		561 57
B. Y. Pippey & Co		506 00
J. A. Stockbridge		257 64
Thompson, De Hart & Co		127 71
	6,411 48	
Deduct repayment:		
By H. J. Minthorn	1,602 72	
	4,808 76	
Support of Indian school at Geneva, Nebr., 1884:		
To J. and B. Allen		40 38
Max H. C. Brombacher		3 84
E. J. Chaffee		64 74
E. F. Church		105 53
J. Chatillon & Sons		10 02
H. B. Claflin		92 29
S. H. Crane		55 24
Carlisle Indian School		143 90
C. H. Castle		8 00
W. W. Davenport		52 23
J. Early		1 33
A. Flagler		2 90
Flagler, Forsyth & Bradley		103 06
Carried forward		683 46

Support of Indian school at Geneva, Nebr., 1884—Continued.		
Brought forward		$683 46
To Hood, Bonbright & Co		460 47
W. H. Hurlbut		31 33
Interior Department		4 40
G. R. Lockwood & Son		4 00
A. L. Mitchell		108 00
J. R. Michael		12 24
R. Murray		1 15
Markley, Alling & Co		2 35
E. Naumburg		886 50
R. A. Robbins		725 80
M. Rosenfield		50 00
J. St. John		288 85
J. M. Shaw		33 08
W. H. Schieffelin		1 20
J. Savery's Son & Co		27 75
S. F. Tappan		10,209 34
W. E. Tefft		92 29
E. Wise		178 50
W. B. Wills		65 00
H. T. Wakeman		7 54
H. Wallach		272 50
H. C. Wells		6 60
W. Whiteside		55 00
W. Wood		17 25
J. H. Woodhouse		75 66
	14,300 26	
Support of Indian children at Hampton School, Virginia, 1884:		
To Hampton Normal and Agricultural Institute	14,972 48	
Support of Indian children at Hampton School, Virginia, 1883:		
To Hampton Normal and Agricultural Institute	1,369 40	
Support of Indian children at schools in private families (no year):		
To B. A. Brouillet		2,775 00
H. W. Bushing		380 00
S. B. Gibson		43 30
Haskell & Wood		175 00
E. F. Halleck Manufacturing Company		6,669 02
J. Kaufman		160 36
Leighton, Jordan & Henderson		35 00
T. G. Mooney		76 87
J. Marvin		2,668 95
J. M. Phillips		625 00
R. H. Pratt		575 00
D. M. Riordan		2,462 27
Smith & Sergeant		26,151 19
	42,796 96	
Deduct repayments:		
By D. P. Andrews	$1,511 97	
J. H. Fleming	375 00	
Interior Department	2,668 95	
A. H. Jackson	07	
J. Kauffman	160 36	
E. C. Monteith	342 98	
L. M. Nickerson	73 37	
D. M. Riordan	2,489 67	
P. B. Smith	4 67	
B. M. Thomas	43 50	
		7,670 54
	35,126 42	
Support of Indian children at schools in States, 1884:		
To American Missionary Association		3,966 25
Beloit College, Wisconsin		205 56
J. B. Brown		835 00
Carried forward		5,006 81

Support of Indian children at schools in States, 1884—Continued.

Brought forward	$5,006 81
To Cherokee Girls' Training School	1,080 05
Coe College, Cedar Rapids, Iowa	83 50
A. A. Edelbrock	214 10
J. H. French	125 25
Good Shepherd Industrial School	445 57
T. W. Haskins	622 03
Interior Department	949 32
Judson College, North Carolina	1,388 18
Lincoln Institution, Philadelphia, Pa	3,327 02
B. Miles	4,925 25
Ottawa University	244 41
M. H. Pegram	835 00
Pacific University, Forest Grove, Oregon	125 33
Presbyterian Board of Foreign Missions	403 75
T. J. Rickman	267 87
A. L. Riggs	3,562 69
J. E. Rhoades	31 30
W. T. Russell	90 55
W. E. Read	98 75
Saint Mary's Training School, Illinois	791 15
A. Schradzke	111 45
Trinity College, North Carolina	1,670 00
White's Manual Labor Institute	4,050 97
M. L. Wood	10 20
T. F. Wilson	32 05
Western Yearly Meeting of Friends	835 00
P. C. Vogt	612 33
	35,939 88

Support of Indian children at schools in States, 1883:

To J. C. Lowrie	69 58
B. Miles	417 50
A. L. Riggs	1,161 97
Trinity College, North Carolina	1,661 65
White's Indian Manual Labor Institute	890 67
P. C. Vogt	250 00
	4,451 87

Support of Jicarilla and Mescalero Apaches, including Mescaleros, 1884:

To W. H. H. Llewellyn	124 95
Deduct from repayment:	
By W. H. H. Llewellyn	260 27
Excess of repayment	135 32

Support of Kansas Indians, 1884:

To C. H. Conover	3 93
E. J. Chaffee	46 38
S. H. Crane	135 82
A. Flagler	4 74
R. Murray	7 93
L. J. Miles	4,567 00
R. A. Robbins	93 07
A. E. Whyland	36 94
J. H. Woodhouse	2 91
W. B. Wills	100 00
H. T. Wakeman	1 24
	4,999 96

Support of Kansas Indians, 1883:

By L. J. Miles	$122 31

Support of Kansas Indians, 1881 and prior years:

By L. J. Miles	$3 47

Support of Kickapoos, 1884:

To J. V. Carter	$717 24
S. Colgate	45 90
C. H. Conover	34
S. H. Crane	113 43
A. Flagler	25 00
Kelley, Maus & Co	140 53
H. King	112 50
G. T. Lane	90
R. Murray	36 15
North River Sugar Refining Company	463 59
W. C. Oburn	1,429 04
R. A. Robbins	27 36
W. H. Schieffelin	57 71
H. C. Slavens	720 64
D. Tredway	21 00
J. A. Taylor	1,125 00
L. Wallace	16 00
H. T. Wakeman	13 38
	5,065 71
Deduct repayment:	
By J. V. Carter	13 29
	5,052 42

Support of Kickapoos, 1883:

To J. V. Carter	30 00
E. Fenlon	526 40
	556 40
Deduct repayment:	
By J. V. Carter	3 80
	552 60

Support of Kickapoos, 1881 and prior years (transfer account):

To Interior Department	8 38
M. H. Newlin	829 89
	838 27
Deduct repayment:	
By J. S. Short	3 25
	835 02

Support of Klamaths and Modocs, 1884:

To L. L. Baker	433 90
H. N. Cook	33 30
S. H. Crane	58 80
W. Davis	7 80
J. E. Gordon	337 06
J. F. Harrison	73 33
G. T. Hawley	301 55
J. C. Johnson	1 04
Kelley, Maus & Co	95 06
H. King	78 25
W. W. Montague	65 57
J. F. Merrill	90 15
J. H. McCann	215 55
L. M. Nickerson	4,014 00
A. C. Nichols	108 37
T. H. Tuthill	3 23
W. F. Whittier	146 47
C. M. Yates	20 35
	6,083 78

Support of Klamaths and Modocs, 1883:

By L. M. Nickerson	$3 59

Support of Klamaths and Modocs, 1881 and prior years:

By L. M. Nickerson	$0 73

Support of Makahs, 1884:		
To H. B. Claflin		$33 29
Kelley, Maus & Co		1 80
R. Lyall		12 45
W. W. Montague		6 58
W. H. Schieffelin		71 79
O. Wood		3,370 00
		3,495 91
Deduct repayment:		
By O. Wood		687 99
		2,807 92
Support of Makahs, 1883:		
To R. Lyall		17 90
C. Willoughby		236 14
		254 04
Deduct repayment:		
By O. Wood		45 00
		209 04
Support of Makahs, 1881 and prior years (transfer account):		
By C. Willoughby	$17 64	
Support of Makahs 1881 and prior years:		
By C. Willoughby	$67 18	
Support of Menominees, 1884:		
To D. P. Andrews		3,640 55
S. Colgate		11 02
H. B. Claflin		22 61
E. J. Chaffee		18 00
S. H. Crane		295 05
Carlisle Indian School		10 00
W. W. Davenport		15 58
J. Dobson		56 64
A. Flagler		3 70
J. Godhelp		10 05
Hood, Bonbright & Co		44 78
B. Hansell		30 00
P. C. Meehan		38 06
R. Murray		38 76
J. R. Michael		2 20
North River Sugar Refining Company		81 81
E. Naumburg		70 80
R. A. Robbins		61 34
W. H. Schieffelin		241 96
J. St. John		73 25
J. M. Shaw		14 20
H. W. Shepard		2 00
W. E. Tefft		37 06
D. Tredway		42 98
H. C. Wells		6 60
H. Wallach		42 00
J. H. Woodhouse		21 76
H. T. Wakeman		10 75
W. B. Wills		50 00
		4,993 51
Support of Menominees, 1883:		
By D. P. Andrews	$350 59	
E. Stephens	447 61	
		798 20
Support of mixed Shoshones, Bannocks, and Sheepeaters, 1881 and prior years:		
By Interior Department	$4 28	
Support of mixed Shoshones, Bannocks, and Sheepeaters, 1881 and prior years (transfer account):		
To Interior Department		21 25
Deduct from repayment:		
By Interior Department		126 69
Excess of repayment		105 44
Support of Modocs in Indian Territory, 1884:		
To C. W. Barstow		$0 65
Max H. C. Brombacher		2 40
H. B. Claflin		23 93
S. Colgate		33 05
C. H. Castle		83 00
E. J. Chaffee		21 73
S. H. Crane		95 91
Carlisle Indian School		14 50
J. Dobson		236 00
D. B. Dyer		2,324 47
C. H. Deere		90 00
A. Flagler		7 89
J. Godhelp		10 05
W. H. Hurlbut		15 18
H. King		5 50
J. S. Latimer		69 50
P. C. Meehan		149 43
R. Murry		3 45
J. C. Magannon		8 40
North River Sugar Refining Company		272 70
E. Naumburg		42 48
G. Peters		17 50
J. S. Page		3 45
R. A. Robbins		15 75
J. St. John		132 30
W. H. Schieffelin		16 59
H. C. Slavens		469 02
W. E. Tefft		39 99
J. H. Woodhouse		36 00
H. C. Wells		13 20
W. B. Wills		24 00
H. T. Wakeman		1 10
W. Whiteside		55 00
H. Wallach		178 90
Watson & Bartholow		12 92
		4,525 94
Deduct repayment:		
By D. B. Dyer		4 92
		4,521 02
Support of Molels, 1884:		
To P. B. Sinnott		2,906 60
Support of Moquis Pueblos, 1883:		
To C. Carter		96 38
J. Deacon		83 00
		179 38
Deduct from repayment:		
By J. H. Fleming		210 18
Excess of repayment		30 80
Support of Navajoes, 1884:		
To G. M. Acklin		7 20
Armour & Co		40 00
Atchison, Topeka and Santa Fé R. R. Co		476 80
Max H. C. Brombacher		2 40
Baltimore and Ohio R. R		16 20
S. H. Crane		565 70
C. H. Castle		25 50
S. Colgate		13 77
Carlisle Indian School		100 26
R. A. Dorman		11 50
W. W. Davenport		10 53
C. H. Deere		782 50
E. W. Denison		65 00
J. Early		3 40
A. Flagler		6 49
D. M. Ferry & Co		125 04
B. Hansell		1 86
F. C. Herrick		525 60
Hampton Normal and Agricultural Institute		630 80
G. V. Hecker & Co		7 50
Kelley, Maus & Co		21 00
K. King		21 50
Carried forward		3,460 55

Support of Navajoes, 1884—Cont'd.		
Brought forward		$3,460 55
To G. T. Lane		86 80
Lamberson & Furman		139 50
P. C. Meehan		106 52
R. Murray		759 70
Milburn Wagon Company		58 20
North River Refining Company		177 25
G. Peters		1,269 10
J. S. Page		16 78
R. A. Robbins		132 65
D. M. Riordan		20,341 26
W. H. Schieffelin		150 63
H. W. Shepard		9 60
H. C. Slavens		565 61
D. Tredway		8 75
G. F. Timms & Co		120 20
J. H. Woodhouse		1,092 40
H. C. Wells		495 00
H. T. Wakemen		17 50
E. A. Webster		992 00
		30,000 00
Support of Navajoes, 1883:		
By G. Eastman	$14 12	
D. M. Riordan	196 69	
		210 81
Support of Navajoes, 1883 (transfer account):		
By G. Eastman	$0 29	
Support of Navajoes, 1882 (transfer account):		
By G. Eastman	$14 85	
Support of Navajoes, 1881 and prior years (transfer account):		
By G. Eastman	$234 29	
Support of Nez Percés, 1884:		
To C. E. Monteith		3,395 00
Support of Nez Percés, 1883:		
By C. E. Monteith	$9 95	
Support of Nez Percés, of Joseph's band, 1884:		
To H. O. Armur		786 50
J. and B. Allen		29 00
H. B. Claflin		10 80
S. Colgate		68 85
J. Culbert		56 50
E. J. Chaffee		108 88
S. H Crane		5 20
J. Dobson		295 00
A. Flagler		2 59
J. Godhelp		50 25
W. H. Hurlbut		33 75
B. Hansell		4 40
Hood, Bonbright & Co		320 11
Hampton Normal and Agricultural Institute		125 00
J. S. Latimer		139 00
P. C. Meehan		421 02
Markley, Alling & Co		24 30
North River Sugar Refining Company		627 21
E. Naumburg		242 00
W. C. Oburn		7,439 48
G. Peters		27 00
J. S. Page		3 45
R. A. Robbins		160 03
E. H. Smith		15 14
H. C. Slavens		1,210 00
W. H. Schieffelin		399 94
J. St. John		31 75
J. W. Scott		3,541 50
Carried forward		16,178 65

Support of Nez Percés, of Joseph's band, 1884—Continued.		
Brought forward		$16,178 65
To W. E. Tefft		108 08
L. E. Woodin		1,290 00
W. Whiteside		355 00
W. Wood		13 00
W. B. Wells		50 00
H. Wallach		723 20
J. H. Woodhouse		5 31
		18,723 24
Deduct repayments:		
By J. W. Scott	$4 23	
L. E. Woodin	266 83	
		271 09
		18,452 15
Support of Nez Percés of Joseph's band, 1883:		
By L. E. Woodin	$60 90	
Support of Nez Percés of Joseph's band, 1882:		
To J. N. T. Goodrich		183 42
Support of Northern Cheyennes and Arapahoes, 1884:		
To H. O. Armour		1,657 50
T. A. Ashburner		79 30
J. and B. Allen		122 50
Max H. C. Brombacher		21 00
E. J. Chaffee		349 50
J. Culbert		113 00
E. F. Church		628 44
S. H. Crane		274 25
H. B. Claflin		311 23
S. Colgate		91 80
Curtis & Co. Manufacturing Company		75 00
Carlisle Indian School		15 00
A. B. Cohn		23 00
J. Dobson		2,335 25
W. W. Davenport		6 73
W. S. Dyer		3,080 00
J. Early		8 50
A. Flagler		22 28
J. Godhelp		67 00
G. V. Hecker & Co		500 00
W. H. Hurlbut		163 00
Hood, Bonbright & Co		1,014 75
J. Irwin		2,209 50
H. King		60 00
J. S. Latimer		417 00
P. C. Meehan		775 05
J. R. Michael		581 68
J. F. B. Marshall		50 95
R. Murray		23 00
S. R. Martin		5,337 00
G. T. Newman		19,951 61
North River Sugar Refining Company		1,090 80
E. Naumburg		872 25
G. F. Penfield		125 93
T. C. Power		1,967 03
R. A. Robbins		490 30
W. H. Schieffelin		92 97
Studebaker Brothers Manufacturing Company		10 00
J. St. John		264 50
H. W. Shepard		212 40
J. F. Sullivan		60 00
H. H. Tobey		85 00
W. E. Tefft		390 96
H. C. Wells		66 00
H. Wallach		2,254 25
W. B. Wills		315 00
W. Whiteside		710 10
J. H. Woodhouse		39 00
N. W. Wells		3,410 00
H. T. Wakeman		28 50
Carried forward		52,849 81

Support of Northern Cheyennes and Arapahoes, 1884—Continued.		
Brought forward		$52,849 81
Deduct repayments:		
By J. Irwin	$501 97	
S. R. Martin	87 34	
		589 31
		52,260 50
Support of Northern Cheyennes and Arapahoes, 1883:		
To E. W. Hancock		7,417 82
J. Irwin		65 00
J. W. L. Slavens		2,865 23
		10,348 05
Deduct repayment:		
By J. Irwin		184 51
		10,163 54
Support of Northern Cheyennes and Arapahoes, 1882:		
To H. T. Clarke		144 68
Support of Pawnees, 1884:		
To H. O. Armour		489 87
G. M. Acklin		3 60
T. Ashburner		39 65
J. and B. Allen		48 75
Max H. C. Brombacher		34
A. Corn		8 75
H. B. Claflin		135 81
S. Colgate		45 90
E. J. Chaffee		129 08
S. H. Crane		445 91
Carlisle Indian School		15 85
R. A. Dorman		11 50
W. W. Davenport		38 57
J. Dobson		236 00
C. H. Deere		41 25
A. Flagler		23 97
W. H. Hurlbut		29 50
Hood, Bonbright & Co		144 73
Hampton Normal and Agricultural Institute		69
J. S. Latimer		139 00
G. R. Lockwood & Son		54 40
P. C. Meehan		123 41
R. Murray		2 75
J. R. Michael		8 30
F. MacVeagh		45 00
North River Sugar Refining Co		272 70
E. Naumburg		233 75
W. C. Oburn		1,658 51
G. Peters		12 00
R. A. Robbins		76 36
W. H. Schieffelin		200 00
J. M. Shaw		29 99
J. W. Scott		7,560 00
H. C. Slavens		605 00
W. E. Tefft		159 53
H. H. Tobey		17 00
D. Tredway		107 36
A. E. Whyland		84 08
L. E. Woodin		2,968 00
J. H. Woodhouse		89 50
W. Whiteside		77 50
H. C. Wells		6 60
W. Wood		13 00
L. Wallace		4 00
H. Wallach		255 95
E. Wise		178 50
H. T. Wakeman		7 55
Watson & Bartholomew		42 60
W. B. Wills		152 00
		17,074 06
Deduct repayments:		
By J. W. Scott	$57 98	
L. E. Woodin	429 93	
		487 91
		16,586 15
Support of Pawnees, 1883:		
To E. Fenlon		$453 83
Markley, Alling & Co		11 00
		464 83
Deduct repayment:		
By L. E. Woodin		220 79
		244 04
Support of Pawnees, 1881 and prior years, (transfer account):		
By C. H. Searing	$92 15	
J. C. Smith	226 10	
	$318 25	
Support of Poncas, 1884:		
To H. O. Armour		1,305 98
J. and B. Allen		36 25
Bonesteel & Co		12 60
H. B. Claflin		10 80
E. F. Church		101 01
J. Culbert		56 50
E. J. Chaffee		55 15
S. H. Crane		112 03
Carlisle Indian School		111 70
J. Dobson		949 50
C. H. Deere		105 00
W. W. Davenport		1 20
A. Flagler		6 14
W. H. Hurlbut		63 00
Hood, Bonbright & Co		136 99
H. C. Kelsey		696 00
J. S. Latimer		347 50
I. Lightner		2,620 00
P. C. Meehan		487 73
R. Murray		7 20
J. R. Michael		15 20
North River Sugar Refining Company		818 10
E. Naumburg		987 26
W. C. Oburn		9,342 53
G. Peters		13 50
R. A. Robbins		41 56
H. C. Slavens		1,452 00
J. St. John		203 80
W. H. Schieffelin		434 18
J. W. Scott		4,816 75
W. E. Tefft		108 41
J. H. Woodhouse		34 58
L. E. Woodin		1,858 20
W. Whiteside		332 50
H. T. Wakeman		2 89
H. Wallach		201 25
		27,884 99
Deduct repayments:		
By J. W. Scott	$43 07	
L. E. Wooden	167 37	
		210 44
		27,674 55
Support of Poncas, 1883:		
To E. Fenlon		3,035 87
Deduct repayments:		
By I. Lightner	$57 56	
L. E. Wooden	308 59	
		366 15
		2,669 72
Support of Poncas, 1882:		
By T. J. Jordan	$337 20	
Support of Pueblos of New Mexico, 1883:		
To L. Speigelberg		59 09
Deduct from repayments:		
By P. Sanchez	$1,456 78	
B. M. Thomas	112 67	
		1,569 45
Excess of repayments		1,510 36

Support of Pueblos of New Mexico, 1883 (transfer account):		
By B. M. Thomas.....	$42 75	
Support of Quapaws, 1884:		
To S. H. Crane.....		$84 82
D. B. Dyer.....		125 01
A. Flagler.....		5 15
Markley, Alling & Co.....		4 50
R. Murray.....		2 30
H. C. Wells.....		3 30
H. T. Wakeman.....		28 34
		253 42
Support of Qui-nai-elts and Quil-lehutes, 1884:		
To L. L. Baker.....		18 10
J. Culbert.....		5 65
S. H. Crane.....		1 60
J. Dobson.....		113 28
W. Davis.....		89
W. W. Dodge.....		294 88
J. E. Gordon.....		12 51
Hood, Bonbright & Co.....		5 98
J. T. Harrison.....		27 64
G. T. Hawley.....		65 24
J. C. Johnson.....		66
G. R. Lockwood & Son.....		1 60
W. W. Montague.....		7 18
J. F. Merrill.....		17 03
J. M. McCann.....		4 55
R. A. Robbins.....		5 65
R. W. Simpson.....		1 16
J. St. John.....		15 87
W. H. Schieffelin.....		68 75
W. B. Wills.....		26 40
J. H. Woodhouse.....		21
W. F. Whittier.....		9 80
W. Whiteside.....		14 50
H. Wallach.....		77 76
Watson & Bartholow.....		5 08
C. Willoughby.....		2,756 18
C. M. Yates.....		63
		3,558 78
Support of Qui-nai-elts and Quil-lehutes, 1883:		
By O. Wood.....	$180 00	
Support of Qui-nai-elts and Quil-lehutes, 1882:		
By Interior Department	$1 00	
O. Wood.....	1 00	
		2 00
Support of Qui-nai-elts and Qail-lehutes, 1881 and prior years:		
By Interior Department	$1 00	
O. Wood.....	50	
		1 50
Support of Sacs and Foxes of Missouri, 1884:		
To H. C. Linn.....		166 00
Support of Shoshones and Bannocks, 1884:		
To T. A. Ashburner.....		91 19
J. & B. Allen.....		122 50
A. Corn.....		17 50
E. J. Chaffee.....		349 50
E. F. Church.....		83 75
A. L. Cook.....		6,207 09
J. Culbert.....		113 00
H. B. Claflin.....		463 37
J. Dobson.....		2,025 50
J. Godhelp.....		201 00
W. H. Hurlbut.....		293 75
Carried forward.....		9,968 15

Support of Shoshones and Bannocks, 1884—Continued.		
Brought forward.....		$9,968 15
To Hood, Bonbright & Co.....		1,067 30
J. Irwin.....		2,725 00
Interior Department.....		2,642 65
J. S. Latimer.....		286 34
J. R. Michael.....		1,351 73
S. R. Martin.....		3,320 00
E. Naumburg.....		1,316 95
R. A. Robbins.....		258 61
J. St. John.....		333 50
J. F. Sullivan.....		60 00
W. E. Tefft.....		479 73
H. H. Tobey.....		85 00
H. Wallach.....		3,234 05
W. Whiteside.....		923 88
W. B. Wills.....		700 00
		28,752 89
Deduct repayment:		
By J. Irwin.....		55 00
		28,697 89
Support of Shoshones and Bannocks, 1883:		
To E. W. Hancock.....		3,582 18
J. Irwin.....		376 50
T. J. Kiesel.....		1,621 50
		5,580 18
Deduct repayments:		
By A. L. Cook.....	$112 57	
J. Irwin.....	165 52	
		278 09
		5,302 09
Support of Shoshones and Bannocks, 1882:		
To Interior Department.....		113 11
Support of Shoshonees and Bannocks, 1881 and prior years (transfer account):		
By Interior Department	$212 57	
Support of Sioux not otherwise provided for, 1883:		
To C Aubrey.....		236 00
J. B. A. Bronillet.....		1,108 34
E. W. D. Bryan.....		568 80
Mary Brizzee.....		71 39
H. W. Duncan.....		607 52
G. L. Davenport.....		75 00
A. C. Fosbach.....		21 74
M. Greyson.....		1,833 33
Interior Department.....		73 61
H. Kendall.....		2,297 14
J. C. Lowrie.....		1,133 33
R. H. Milroy.....		86 80
M. C. Murdock.....		501 62
Emma S. Mahan.....		44 87
J. S. Mayhugh.....		64 88
J. Naylor.....		71 50
W. M. Ridpath.....		506 00
G. Ryneal, jr.....		49 00
R. A. Robbins.....		75 00
S. E. Snider.....		150 00
M. E. Strieby.....		312 50
S. D. Terry.....		149 44
Mary E. Terry.....		71 70
Ada C. Williams.....		46 96
L. Zedlendorf.....		546 00
		10,702 47
Deduct repayments:		
By D. P Andrews.....	$62 50	
E. P. Allen.....	66 04	
Bureau Catholic Indian Missions.....	7 14	
A. L. Cook.....	100 00	
Carried forward..	235 68	10,702 47

Support of Sioux not otherwise provided for, 1883—Continued.		
Deduct repayments:		
Brought forward	$235 68	$10,702 47
By J. J. Critchlow	02	
J. V. Carter	69 91	
J. W. Clark	163 34	
G. L. Davenport	75 00	
D. B. Dyer	80 41	
W R. Durfee	550 00	
E. Eells	05	
J. Harries	16 00	
P. B. Hunt	477 87	
A. H. Jackson	106 70	
C. P. Luse	875 89	
S. S. Lawson	1 10	
J. D. Miles	2,209 19	
C. E. Monteith	392 75	
J. M. McMaster	106 46	
R. H. Milroy	86 80	
L. M. Nickerson	105 23	
N. S. Porter	33 00	
W. M. Ridpath	757 07	
E. J. Sommerville	44 55	
J. Smith	130 85	
O. Wood	107 82	
L. E. Woodin	46 41	
G. W. Wilkinson	24 50	
R. G. Wheeler	185 00	
		6,881 60
		3,820 87
Support of Sioux not otherwise provided for, 1882:		
To Interior Department		2 00
Deduct from repayments:		
By J. Biggs	$2 60	
C. E. Monteith	66	
O. Wood	2 50	
		5 76
Excess of repayments		3 76
Support of Sioux not otherwise provided for, 1881 and prior years (transfer account):		
To P. B. Hunt		1 49
Deduct from repayments:		
By Interior Department	$196 49	
R. H. Milroy	381 14	
R. M. Pratt	2 48	
B. M. Thomas	102 18	
		682 29
Excess of repayments		680 80
Support of schools not otherwise provided for, 1881 and prior years:		
By J. L. Broaddus	$4 02	
J. H. Stout	55	
		4 57
Support of Shoshones in Wyoming, 1884:		
To H. O. Armour		765 00
Max H. C. Brombacher		12 90
A. B. Cohn		11 50
E. F. Church		635 63
S. H. Crane		256 03
S. Colgate		91 80
Carlisle Indian School		26 00
W. W. Davenport		6 73
J. Early		8 50
A. Flagler		22 28
G. V. Hecker & Co		250 00
Hood, Bonbright & Co		11 25
H. King		60 00
G. R. Lockwood & Son		46 14
P. C. Meehan		486 08
J. F. B. Marshall		18 05
Carried forward		2,707 89

Support of Shoshones in Wyoming, 1884—Continued.		
Brought forward		$2,707 89
To R. Murray		23 00
North River Sugar Refining Company		818 10
G. T. Newman		9,975 77
G. F. Penfield		125 93
R. A. Robbins		94 59
W. H. Schieffelin		87 46
J. M. Shaw		1 00
Studebaker Brothers Manufacturing Company		10 00
H. W. Shepard		108 20
H. C. Wells		66 00
J. H. Woodhouse		34 77
H. T. Wakeman		21 37
N. W. Wells		1,540 00
		15,614 08
Deduct repayment:		
By Interior Department		674 43
		14,939 65
Support of Shoshones in Wyoming, 1883:		
To J. W. L. Slavens		1,432 60
Deduct repayment:		
By J. Irwin		25 33
		1,407 27
Support of Shoshones in Wyoming, 1882:		
By Interior Department	$77 11	
Support of Sioux of Devil's Lake, 1884:		
To A. Barclay		1,066 81
A. Corn		70 00
A. B. Cohn		37 50
J. W. Cramsie		4,896 70
R. A. Dorman		259 90
J. Dobson		354 00
A. Flagler		141 67
G. V. Hecker & Co		25 00
B. Hansell		12 47
H. G. Haas		250 38
J. S. Latimer		208 50
P. C. Meehan		196 91
J. F. B. Marshall		125 00
R. Murray		11 50
North River Sugar Refining Company		368 15
G. F. Penfield		40 89
A. E. Whyland		99 28
		8,164 66
Deduct repayments:		
By J. W. Cramsie	$164 31	
Interior Department	35	
		164 66
		8,000 00
Support of Sioux of different tribes, including Santee Sioux of Nebraska, 1884:		
To H. O. Armour		67,207 50
T. A. Ashburner		1,229 19
G. M. Acklin		248 54
J. & B. Allen		1,886 13
W. F. Buckley		2,736 17
B. W. Barstow		29 25
Max H. C. Brombacher		404 31
Bonesteel & Co		42 00
A. Corn		1,583 75
Carlisle Indian School		6,844 88
A. B. Cohn		131 50
E. J. Chaffee		7,380 59
J. Culbert		3,052 13
E. F. Church		1,993 93
Carried forward		74,769 87

Support of Sioux of different tribes, including Santee Sioux of Nebraska, 1884—Continued.		
Brought forward		$94,769 87
To S. H. Crane		8,998 13
H. B. Claflin		5,476 04
J. Chattillon & Son		76 79
S. Colgate		3,256 60
C. H. Cattle		13,517 00
M. C. Connors		7,727 58
C. H. Conover		60 77
E. D. Cornings		13 72
R. A. Dorman		92 00
A. C. Davis		29,540 21
J. Dobson		46,604 99
W. W. Davenport		197 17
C. H. Deere		3,858 00
A. G. Evans		216,574 45
J. Early		55 20
S. F. Ester		2,848 49
A. Flagler		840 83
Flagler, Forsyth & Bradley		16 22
J. W. French		450 00
A. Fraser		250,506 03
D. M. Ferry & Co		1,162 66
J. Godhelp		1,852 55
J. G. Gasmann		29,086 09
E. T. Howard		81 23
W. H. Hurlbut		2,973 57
Haskell & Wood		175 00
G. V. Hecker & Co		6,837 50
R. Hood		24,640 27
E. W. Herendeen		170 00
Hampton Normal and Agricultural Institute		1,905 17
B. Hansell		114 65
C. B. Hotchkiss		30 00
F. C. Herrick		2,162 00
Hartford Woven Wire Mattress Company		679 75
Hood, Bonbright & Co		10,240 27
H. King		455 66
H. C. Kelsey		7,044 29
F. E. Kohler		50 25
Kelley, Maus & Co		449 47
J. S. Latimer		5,850 51
I. Lightner		20,590 47
G. R. Lockwood & Son		524 32
G. T. Lane		1,019 80
W. R. Merriam		76,607 11
P. C. Meehan		20,874 15
R. Murray		1,378 53
Markley, Alling & Co		511 40
J. R. Michael		8,867 64
V. T. McGillycuddy		49,232 52
J. McLaughlin		25,052 57
J. F. Marshall		375 00
F. Mac Veagh		91 76
North River Sugar Refining Company		38,099 82
E. S. Newman		293,731 90
E. Naumburg		34,896 80
G. F. Penfield		1,827 10
G. Peters		760 50
J. S. Page		600 58
T. C. Power		4,794 13
J. Paul		5,667 58
R. A. Robbins		9,142 93
M. Rosenfield		4,214 00
J. H. Rothwell		5,150 00
H. C. Slavens		30,902 76
Studebaker Bros. Manufacturing Company		5,328 06
J. M. Shaw		91 20
W. H. Schieffelin		2,945 42
J. St. John		14,259 65
F. L. Sommer		5,992 81
H. W. Shepard		1,940 22
E. H. Smith		897 03
J. F. Sullivan		372 00
C. W. Spicer		3,414 93
W. A. Swan		15,293 32
W. E. Tefft		6,048 58
Carried forward		1,472,937 57

Support of Sioux of different tribes, including Santee Sioux of Nebraska, 1884—Continued.		
Brought forward		$1,472,937 57
To D. Tredway		1,106 28
H. H. Toby		395 25
D. Talmage		2,105 83
F. H. Tuthill		48 38
J. Van & Co		51 00
A. E. Whyland		1,111 49
W. Whiteside		12,418 14
H. C. Wells		2,355 65
J. H. Woodhouse		2,168 14
L. Wallace		32 19
E. Wise		3,170 16
H. Wallach		33,111 68
J. G. Wright		40,105 18
W. B. Wills		3,474 40
W. Wood		521 30
E. B. Woodworth		35 70
H. T. Wakeman		323 59
Watson & Bartholow		125 39
A. B. Wilcox		1,792 98
		1,577,390 30
Deduct repayments:		
By W. W. Davenport	$0 15	
J. G. Gasmann	553 01	
I. Lightner	118 86	
V. T. McGillycuddy	5,116 83	
J. McLaughlin	247 32	
T. C. Power	1,682 40	
W. A. Swan	141 54	
Watson & Bartholow	6 38	
J. G. Wright	570 30	
		8,436 79
		1,568,953 51
Support of Sioux of different tribes, including Santee Sioux of Nebraska, 1883:		
To Adriance, Platt & Co		18 19
Baltimore & Ohio R. R		48 70
J. B. A. Brownillet		375 00
Buffalo Scale Company		98 00
E. H. Briggs		39 98
A. C. Davis		14,131 99
S. F. Estes		50 00
G. W. Felt		1,408 02
J. G. Gasmann		5,783 68
Gaar, Scott & Co		49 50
J. P. Hoagland		2,541 00
A. Kyes		12,759 00
Interior Department		377 55
T. Langdon		50 50
W. R. Merriam		108,175 59
Markley, Alling & Co		25 00
McCormick Harvesting M. C		48 37
E. S. Newman		18,153 79
R. M. Powers		32,117 45
T. C. Power		8,000 00
Pilkington & Co		74 10
Studebaker Brothers Manufacturing Company		175 00
J. L. Tyffe		15,394 21
C. S. Weaver		9,995 00
J. H. Woodhouse		37 40
W. A. Wood Mowing and Reaping Machine Company		40 62
H. B. Wynn and A. Lavender		25,918 16
J. G. Wright		153 54
		256,039 34
Deduct repayments:		
By J. G. Gasmann	$946 30	
J. McLaughlin	37 28	
V. T. McGillycuddy	6,530 23	
W. H. Parkhurst	1,164 55	
W. A. Swan	810 45	
J. G. Wright	10,221 28	
		19,710 09
		236,329 25

Support of Sioux of different tribes, including Santee Sioux of Nebraska:
To J. E. Reed $57 36
W. R. Merriam 61 71
119 07

Deduct from repayments:
By Interior Department $401 42
I. Lightner 22 50
L. Love 3 00
V. T. McGillycuddy 3 06
429 98

Excess of repayments 310 91

Support of Sioux of different tribes, including Santee Sioux of Nebraska, 1881 and prior years (transfer):
To I. Lightner 142 09
War Department 141 75
283 84

Deduct repayment:
By A. G. Booone 6 52
277 32

Support of Sioux of different tribes, including Santee Sioux of Nebraska, 1881 and prior years:
By A. G. Boone $141 08
H. Gregory 10 98
L. Love 50
V. T. McGillycuddy, 19 96
W. H. Parkhurst ... 50
173 02

Support of Sioux of Lake Traverse, 1884:
To S. H. Crane 326 69
R. A. Dorman 11 50
E. T. Howard 81 23
North River Sugar Ref'g. Co. 463 59
H. W. Shepard 32 70
B. W. Thompson 7,005 94
A. E. Whyland 73 88
7,995 53

Support of Sioux, Yankton tribe, 1884:
To H. O. Armour 1,870 00
Max H. C. Brombacher 48
H. T. Disbrow 8 25
J. Early 8 16
G. V. Hecker & Co 250 00
B. Hansell 17 47
A. Kyes 1,992 00
W. R. Merriam 2,025 00
P. C. Meehan 1,466 59
F. MacVeagh 154 56
North River Sugar Ref'g Co.. 1,827 09
G. Peters 4 50
W. M. Ridpath 5,766 46
H. C. Slavens 29,814 98
H. C. Wells 66 00
A. E. Whyland 7 13
45,278 67

Deduct repayments:
By W. M. Ridpath 278 78
44,999 89

Spport of Sioux, Yankton tribe, 1883:
To W. M. Ridpath 36 00
Deduct from repayment:
By W. M. Ridpath 624 25
Excess of repayment 588 25

Support of Sioux, Yankton tribe, 1882:
To W. D. E. Andrews $235 46

Support of Sioux, Yankton tribe, 1881 and prior years:
By W. D. E. Andrews. $298 73

Support of Sklallams, 1884:
To J. and B. Allen 7 25
L. L. Baker 41 34
A. Corn 4 20
E. F. Church 143 36
E. J. Chaffer 26 52
J. Dobson 118 00
W. W. Dodge 3, 65 49
E. Eells 115 00
J. E. Gordon 10 87
W. H. Hurlbut 15 18
Hood, Bonbright & Co 63 13
J. F. Harrison 49 69
G. T. Hawley 126 81
W. A. Jones 9 70
J. C. Johnson 1 04
J. Linforth 3 80
W. W. Montague 1 20
J. F. Merrill 54 90
J. H. McCann 41 57
E. Naumburg 110 93
R. A. Robbins 65
S. Seller 17 80
R. W. Simpson 5 76
W. H. Schieffelin 337 84
J. F. Sullivan 3 60
H. H. Toby 4 25
J. St. John 69 60
W. Whiteside 29 35
W. J. Wiley 59 79
W. B. Wills 68 80
W. F. Whittier 10 50
H. Wallach 53 40
C. M. Yates 5 95
4,677 27

Deduct repayment:
By E. Eells 157 50
4,519 77

Support of Sklallams, 1883:
By E. Eells $2 04

Support of Tonkawas at Fort Griffin, Texas, 1884:
To E. Chandler 3,000 00

Support of Tonkawas at Fort Griffin, Texas, 1882:
By F. M. Lynde $0 70

Support of Tonkawas at Fort Griffin, Texas, 1871 and prior years:
By F. M. Lynde $6 95

Support of Tabequache, Muache, Capote, Weeminuche, &c., 1881 and prior years (transfer account):
By H. Page $74 77

Utahs, Tabequache band, 1884:
To J. F. Gardner 540 00
J. F. Minnis 180 00
720 00

Deduct repayment:
By J. F. Minnis 13 69
706 31

Support of confederated bands of Utes, 1884:
To G. M. Ackin 30 60
J. B. Adams & Co 3,375 79

Carried forward 3,406 39

Support of confederated bands of Utes, 1884—Continued.

Brought forward		$3,406 39
To S. Colgate		141 37
E. J. Chaffee		566 80
E. F. Church		269 02
J. Culbert		141 25
H. B. Claflin		316 17
C. H. Castle		21 25
S. H. Crane		249 33
Carlisle Indian School		249 00
J. Dobson		5,343 75
E. W. Davis		7,043 35
H. T. Disbrow		40 60
W. W. Davenport		54
J. Early		9 35
A. Flagler		2 86
J. Godhelp		75 38
J. F. Gardner		6,009 72
G. V. Hecker & Co		275 00
W. H. Hurlbut		314 13
Hampton Normal and Agricultural Institute		91 25
Hood, Bonbright & Co		298 34
R. C. Haywood		121 26
L. Johnson		800 00
G. T. Lane		53 80
P. C. Meehan		886 51
J. F. Minnis		1,500 00
J. R. Michael		1,035 75
Max H. C. Brombachee		28 80
R. Murray		27 55
North River Sugar Ref'g Co.		1,527 12
E. Naumburg		1,851 85
G. F. Penfield		47 19
G. Peters		13 50
W. Patten		6,430 00
R. A. Robbins		158 96
W. H. Schieffelin		249 48
H. C. Slavens		15,033 56
J. St. John		672 00
Z. Staub		5,354 08
W. H. Shepard		280 00
A. Sacks & Co		97 29
W. E. Teffts		263 77
D. Tredway		12 25
H. C. Wells		79 20
E. A. Webster		288 60
W. Whiteside		1,525 97
F. Watson		3,328 15
W. Wallach		2,307 63
W. B. Wills		910 00
N. W. Wells		1,400 00
J. H. Woodhouse		85 87
H. T. Wakeman		1 22
		71,236 21
Deduct repayments:		
By J. F. Gardner	$20 35	
J. F. Minnis	170 26	
W. Patten	151 21	
W. H. Schieffelin	3 88	
		345 70
		70,890 51

Support of confederated bands of Utes, 1883:

To War Department		271 47
Deduct from repayments:		
By J. F. Minnis	$243 77	
W. Patten	202 49	
		446 26
Excess of repayments		174 79

Support of confederated bands of Utes, 1883:

To J. J. Critchlow		159 13
Deduct from repayment:		
By H. Page		176 72
Excess of repayment		17 59

Support of Walla Walla, Cayuse, and Umatilla tribes, 1884:

To L. L. Baker		$388 48
H. N. Cook		7 80
S. H. Crane		31 56
W. Davis		15 01
J. E. Gordon		120 13
J. F. Harrison		98 83
G. T. Hawley		652 44
J. C. Johnson		62 52
Kelly, Maus & Co		64 38
H. King		48 60
J. Linford		23 20
W. W. Montague		21 60
J. F. Merrill		12 99
J. H. McCann		49 27
A. C. Nichols		34 84
E. J. Sommerville		4,522 32
S. Seller		2 75
R. W. Simpson		30
J. St. John		61 80
W. H. Scheiffelin		335 53
W. J. Wiley		107 28
W. F. Whittier		18 24
C. M. Yates		6 93
		6,686 80
Deduct repayment:		
By E. J. Sommerville		16 30
		6,670 50

Support of Wichita and other affiliated bands, 1883:

To P. B. Hunt		3 40
Deduct repayment:		
By P. B. Hunt		3 40

Support of Wichita and other affiliated bands, 1882:

To P. B. Hunt		71
Deduct repayment:		
By P. B. Hunt		71

Support of Wichita and other affiliated bands, 1881 and prior years (transfer account):

By P. B. Hunt		$55 25

Support of Yakamas and other Indians, 1884:

To J. & B. Allen		49 00
L. L. Baker		319 13
J. E. Chaffee		87 35
A. Corn		17 50
J. Culbert		28 25
E. F. Church		318 22
H. B. Claflin		131 29
J. Dobson		944 00
W. Davis		60 19
W. W. Dodge		984 19
J. Godhelp		50 25
J. E. Gordon		216 10
W. H. Hurlbut		81 50
T. R. Hayes		29 00
J. F. Harrison		703 03
Hood, Bonbright & Co		309 86
G. F. Hawley		812 86
W. A. Jones		179 95
J. C. Johnson		85 71
Kelley, Maus & Co		18 12
H. King		23 05
J. S. Latimer		139 00
J. Linforth		36 20
G. R. Lockwood & Son		315 46
R. H. Milroy		8,175 00
J. R. Michael		18 94
W. W. Montague		147 97
J. F. Merrill		189 79
J. H. McCann		139 88
A. C. Nichols		370 06
E. Naumburg		626 70
R. A. Robbins		79 36
Carried forward		15,686 91

Support of Yakamas and other Indians, 1884—Continued.

Brought forward		$15,686 91
To Studebaker Brothers Manufacturing Company		387 50
S. Seller		123 68
R. W. Simpson		16 98
J. St. John		328 50
W. H. Scheiffelin		204 24
J. F. Sullivan		12 00
W. E. Tefft		147 91
H. H. Tobey		21 25
W. Whiteside		238 12
W. Wood		26 00
W. J. Wiley		179 37
E. B. Woolworth		45 00
H. Wallach		1,908 25
J. H. Woodhouse		194 05
W. B. Wills		270 00
W. F. Whittier		71 22
Watson & Bartholow		51 42
C. M. Yates		96 95
	20,009 35	
Deduct repayment:		
By R. H. Milroy	98 81	
	19,910 54	

Support of Yakamas and other Indians, 1883:

To R. H. Milroy		513 20
Deduct repayment:		
By R. H. Milroy		311 46
	201 74	

Support of Yakamas and other Indians, 1882:

By J. H. Wilbur	$2 82	

Support of Yakamas and other Indians, 1881 and prior years (transfer account):

By Interior Department transfers	$477 27	

Additional beef, Indian service, 1883:

To C. Aubrey		3,000 00
E. Fenlon		6,560 72
Interior Department		9,383 26
J. C. Naylor		662 76
W. C. Osburn		24,949 35
J. W. L. Slavens		3,725 82
W. P. Shields		149 38
	48,431 29	
Deduct repayment:		
By J. Young	3,000 00	
	45,431 29	

Appeal in Crow Dog case to United States Supreme Court:

To A. J. Plowman, special Indian agent		1,000 00

Appraisal and survey of Otoe and Missouria lands (reimbursable):

To Atchison Daily Champion		219 00
Deduct from repayment:		
By G. H. Rogsdaln	227 15	
Excess of repayment	8 15	

Appraisal and sale of land in Nebraska belonging to the Omaha, Pawnee, Otoe, and Missouria tribes of Indians, 1884 and prior years (reimbursable, transfer account):

To the Pawnee Indians		644 94

Civilization of Indians, 1873 and prior years (transfer account):

By Interior Department	$375 43	

Collecting, &c., establishing Southern Comanches, Wichitas, &c., reservations south of Arkansas River, 1873 and prior years (transfer account):

By Interior Department	$2,904 46	

Consolidating Indian agencies, 1884:

To W. H. H. Llewellyn		$3,995 00
M. Rosenfield		1,290 00
	5,285 00	

Expenses of the Ute Commission:

To J. F. Gardner		880 00
J. Orr		860 00
H. Page		130 45
R. Sylvester		195 76
Union Pacific R. R. Co		34 60
	2,100 81	
Deduct repayment:		
By W. S. Stickney	18 90	
	2,081 91	

Gratuity to certain Ute Indians (no limit):

To E. W. Davis		1,824 66
J. F. Gardner		1,680 25
W. Patten		1,161 75
	4,666 66	
Deduct repayment:		
By H. Page	100 00	
	4,566 66	

Indian school buildings:

To E. P. Allen		362 04
R. W. D. Bryan		98 16
H. W. Bushong		96 00
J. W. Clark		501 50
W. R. Durfee		192 80
E. W. Davis		250 00
E. Eells		1,310 00
Interior Department		2,668 95
Globe Democrat		96 14
J. Kauffman		50 00
C. P. Luse		1,494 39
J. D. Miles		802 94
J. M. McMaster		51 00
J. G. McCallam		1,014 00
J. Marvin		300 00
L. M. Nickerson		400 00
J. S. Page		1 80
D. M. Riordan		2,649 00
R. A. Robbins		24 66
W. M. Redpath		750 00
J. Smith		250 00
S. E. Snider		150 00
E. J. Sommerville		713 85
P. Sanchez		25 00
G. W. Wilkerson		352 70
H. T. Wakeman		5 50
O. Wood		500 00
	15,110 43	
Deduct repayments:		
By J. D. Miles	$709 19	
J. M. McMasters	2 00	
	711 19	
	14,399 24	

Maintaining peace among and with the various tribes and bands of Indians, 1873 and prior years (transfer account):

To War Department		3,355 48

Indian school building near Arkansas City:
To Burlington School Furniture Company $352 65
S. H. Crane 66 06
C. H. Castle 258 00
J. Chatilton & Sons 11 92
W. W. Davenport 109 93
J. Early 1 00
A. Flagler 1 00
Flagler, Forsyth & Bradley .. 18 07
Hood, Bonbright & Co 38 46
W. J. Hadley 1,957 37
Haskill & Wood 300 00
G. R. Lockwood & Son 134 07
D. L. Morse 396 00
Markley, Alling & Co 88 52
R. A. Robbins 1,051 76
C. Schiffbaner 12,552 70
J. Savary's Son & Co 35 75
J. M. Shaw 99 38
Smith & Sargent 4,476 00
—— Schiffbauer 157 25
H. H. Tobey 120 00
J. H. Woodhouse 105 81
22,331 70

Maintenance of school at Brazos Agency, Texas, 1873 and prior years (transfer):
By Interior Department $600 00

Maintenance and education of Cathrine and Sophia Germain:
To Sophia Germain (*née* German) 2,625 00

Maintenance and education of Adelaide and Julia German:
To Adelaide German 125 00
Julia German 125 00
250 00

Maintenance and education of Helen and Heloise Lincoln:
To Helen Lincoln (Hardy) 3,000 00
Washington City Orphan Asylum 93 75
3,093 75

Negotiating with Sioux for modification of treaties:
To N. Edmunds 5,000 00

Payment of indemnity to Poncas:
To I. Lightner 2,000 00

Payment to Ute Indians for individual improvements:
To E. W. Davis 100 00
R. Sylvester 150 00
250 00
Deduct repayment:
By R. Sylvester 150 00
100 00

Purchase of wagons, teams, tools, &c., for Northern Superintendency, 1873 and prior years:
By J. M. Troth $53 76

Reimbursement to Creek orphan fund:
By J. Q. Tufts $723 80

Relief of destitute Indians in Nevada:
To J. M. McMaster 1,150 00

Relief of Louisa Boddy:
To Louisa Boddy $5,400 00

Removal of Pawnees (reimbursable):
To the Pawnee Indians 7,135 79

Removal and support of confederated bands of Utes:
To Atchison, Topeka and Santa Fé R 348 00
H. E. Allen 14 38
Baltimore and Ohio R. Co 370 55
W. E. Day 21,600 00
J. F. Gardner 33 25
H. Lenders 9,014 00
D. G. Major 37,705 50
W. Patten 3,150 00
C. Popper 1,800 00
Tyler & Medary 150 00
Union Pacific R. Co 145 62
Utah Central Railway Co 10 75
74,342 05
Deduct repayments:
By J. J. Critchlow $365 42
Interior Department 5,740 67
J. F. Minnis 3 60
W. Patten 391 18
R. Sylvester 195 76
6,696 63
67,645 42

Removal and support of Otoes and Missourias:
To Chicago Tribune, Illinois 171 36

Relief of Indians at Crow, Fort Belknap, Fort Peck, and Blackfeet Agencies:
To C. Broadwater 12,302 29
W. M. Galt 10 00
Herald, of Helena, Mont 22 00
T. O. Hanlon 999 94
W. H. Ijams 2 50
Journal, of Kansas City, Mo. 30 00
W. B. Jordan 9,412 89
A. N. Johnson 13,845 72
P. A. Mannix 750 00
L. H. Maxfield 6,766 80
Pioneer Press, Saint Paul, Minn 29 25
H. A. Perkins, Journal, Sioux City 25 00
T. C. Power 23,926 38
S. Ray 48 62
Sioux City Daily Journal 95 00
H. C. Slavens 2,755 72
71,022 11

Reservoir at headwaters of the Mississippi, awards to Chippewas, Pillagers, and Southwestern bands:
By C. P. Luce $15,664 00

School building and supplies of school for Indians of Sioux Reservation, Dakota:
To Burlington School Furniture Company 262 50
J. Dobson 1,298 00
J. G. Haskell 66 25
A. L. Mitchell 440 00
Smith and Sargent 15,976 95
Smith Davis Manufacturing Company 578 20
H. H. Tobey 512 00
S. F. Tappan 5,060 94
24,194 84

Stock cattle or sheep for Indian tribes, 1884:		
To T. C. Power		$18,059 44
J. H. Riley		3,000 00
		21,059 44
Stock cattle for Indian industrial schools, 1884:		
To E. Eells		660 00
J. Kauffman		200 00
J. Marvin		1,450 00
D. M. Riordan		500 00
S. E. Snyder		200 00
S. F. Tappan		500 00
C. Willoughby		500 00
F. M. Wadsworth		500 00
		4,510 00
Survey and appraisement of Omaha lands (reimbursable):		
To J. B. Detwiler		$2,500 00
D. Duggan		1,671 06
		4,171 06
Deduct repayment:		
By J. B. Detwiler		1,671 06
		2,500 00
Survey and appraisement of Umatilla lands (reimbursable):		
To N. A. Cornoyer		1,500 00
P. Zahner		2,000 00
		3,500 00
Survey of Indian reservations, 1883:		
To P. Ricker		2,500 00

INTERIOR—PENSIONS.

Army pensions, 1884:		
To N. A. Adams		$4,380,000 00
T. D. Boynton		397,500 00
S. Connor		2,885,000 00
C. R Coster		3,675,000 00
H. Cox		743,000 00
R. Errett		3,475,000 00
E. Ferguson		3,488,000 00
D. W. Gooch		4,580,000 00
T. Gaines		4,075,000 00
H. R. Gibson		3,492,000 00
F. Knefler		5,065,000 00
R. M. Kelly		1,891,000 00
S. Post		3,186,000 00
T. L. Poole		5,678,000 00
J. Rich		4,079,000 00
Ada C. Sweet		5,875,000 00
H. G. Sickel		3,675,000 00
A. T. Wikoff		5,980,000 00
E. L. Whitford		2,786,000 00
J. R. Atwood		22 67
S. B. Adams		17 07
W. Allison		10 93
M. E. Anderson		18 40
D. B. Abbott		12 53
M. A. Adams		9 60
A. J. Andrews		13 60
J. P. Amant		21 33
A. Aubertin		18 67
B. C. Anderson		20 00
C. B. Allen		1,015 00
A. Arms		18 50
G. A. Ayres		53
M. Ahearn		1,172 53
M. E. Achorn		18 93
R. B. Ayres		466 40
A. J. Anderson		14 67
J. A. Allman, deceased		87 67
F. Amelung		10 67
S. W. Alvord		51 57
R. Archer		17 33
J. C. Austin		3 20
H. V. Asseldonk		21 60
R. Anstead		21 33
C. Amsler		17 07
W. Adams		26 13
G. B. Adkins		7 47
A. Ayer		18 65
Ann Axtell		14 67
M. P. Atkins		15 73
A. Atkinson		510 00
H. Apfeld		63 50
T. Abrams		7 20
J. H. Alvis		12 53
E. Allen		40 20
T. Atha		7 20
Carried forward	69,409,325 08	
Army pensions, 1884—Continued.		
Brought forward		$69,409,325 08
To C. Adams		21 53
L. Avery		13 60
H. Aman		7 20
D. Brown		14 67
J. J. Baker		15 73
R. Barber		9 60
N. W. Brainard		20 00
W. W. Brooks		19 47
J. G. Bridges		35 00
J. W. Ball		21 33
D. Brutschep		18 40
D. Boughton		14 13
C. C. Bucklin		19 20
S. Browning		9 87
M. C. Burch		12 80
E. Britt		12 80
D. S. Bull		141 50
M. A. Beatty		7 47
S. Bragdon		22 00
J. Borland		72 42
C. M. Burke		18 40
D. S. Blair		22 40
M. Behir		1,098 50
M. J. Boyd		28 80
J. Blum		27 20
C. D. Bailey		18 67
A. Burgdorf		43 63
E. Berry		18 13
L. Bassett		19 20
A. M. Bent		42 93
O. Biles		24 80
J. Butterworth		24 00
W. T. Barrett		39 50
A. S. Beverly		2 40
A. J. Bradley		20 27
M. Brown		18 13
J. Burkitt		10 93
Ann Bliss		27 20
L. I. Berg		25 00
M. A. Bennett		23 73
G. Burgess		22 13
D. Brumley		18 40
I. Brannan		12 80
A. K. Bruce		5 60
B. H. Bagshaw		20 27
H. Burke, jr		394 00
E. Ball		15 20
J. H. Baird		30 00
A. Bollinger		9 33
M. J. Brisbin		17 87
A. N. Barnaby		2 40
E. W. Blake		13 07
L. Blanchard		14 67
W. S. Blackman		408 87
Carried forward	69,412,372 23	

Army pensions, 1884—Continued.

	Brought forward	$69,412,372 23
To	W. H. Banks	16 80
	V. Benson	13 60
	J. A. Ballard	286 67
	A. Binker	325 00
	C. L. Betton	9 60
	S. G. Burrison	24 53
	W. Bowen	14 67
	R. Buchanan	19 20
	E. D. Baker	13 60
	L. C. Blankenship	11 20
	M. Bridge	10 93
	R. Bogard	19 47
	J. Bakersmith	41 00
	W. W. Brown	1,630 67
	M. C. Bailey	17 60
	H. Barrett	14 40
	M. E. Bonner	21 33
	F. Berger	436 13
	W. Beck	16 53
	P. Barrett	18 93
	E. Ball	10 93
	J. Booth	13 40
	H. Bradley	20 80
	W. P. Burnett	17 87
	N. Blackman	25
	A. Baxter	1 87
	W. M. Boyd	122 50
	M. L. Bishop	14 93
	E. W. Bantam	15 20
	D. W. Bussinger	16 53
	C. E. Butterworth	17 33
	M. H. Bivins	32 53
	L. Bauman	11 20
	T. J. Brown	2 00
	C. B. Brown	80
	E. E. Birken	6 40
	E. W. Barker	13 87
	G. Bryant	90 40
	J. Boyle	17 33
	M. Burne	4 53
	M. G. Bradeen	20 80
	M. A. Bell	17 87
	G. H. Bennett	16 80
	J. H. Burgess	22 40
	W. Brady	22 67
	W. C. Butler	4 00
	G. Barber	15 20
	D. S. Bull	16 00
	A. H. Bunch	8 80
	T. D. Barry	32 00
	R. Bloomfield	23 20
	P. C. Barrett	21 07
	R. Braun	17 50
	L. E. Brown	45 90
	J. Van Broeklin	20 80
	A. C. Brown	20 53
	I. C. Burrows	22 40
	F. W. Baker	10 67
	E. Blodgett	21 33
	W. J. Bruce	23 47
	E. Byrum	307 00
	N. Brake	18 93
	W. Burkett	13 55
	A. K. Buckbee	14 93
	L. Bookwalter	64 50
	I. M. Boynton	18 40
	L. S. Burnpus	23 73
	Mrs. C. A. Brandt	20 80
	I. Barnes	2 40
	E. Bright	20 27
	L. D. Bone	13 33
	Eliza Booth	17 87
	T. F. Brush	21 60
	W. H. Blyton	57 60
	E. Bayden	23 47
	C. N. Benefield	18 40
	E. G. Butler	5 87
	L. J. Bowen	18 67
	L. H. Brackett	162 93
	N. M. Barber	14 93
	M. L. Bartlett	23 47
	Carried forward	69,417,050 82

Army pensions, 1884—Continued.

	Brought forward	$69,417,050 82
To	A. Brewet	22 40
	T. F. Bloomfield	30 00
	B. L. Burgers	16 50
	W. F. Brown	4 80
	S. J. Bowlby	11 73
	J. Barnett	6 00
	K. C. Bartholomew	22 13
	M. A. Burnham	19 73
	E. A. Bruce	25 00
	W. A. Brown	23 47
	H. F. Brown	450 00
	J. Beach	15 20
	C. Brown	15 47
	G. Boling	9 33
	M. Buckley	16 53
	F. S. Burns	12 00
	M. Barnett	1 33
	J. H. Brown	14 93
	E. Blissitt	14 67
	H. E. Brown	23 47
	G. W. Byrd	19 47
	C. S. Breese	19 47
	N. L. Babcock	22 67
	L. J. Brown	8 53
	J. C. Coudrey	11 73
	S. Clark	21 87
	M. J. Cole	12 80
	J. A. Carter	17 60
	J. Colburn	21 87
	E. Clement	22 13
	R. Champion	22 67
	Mrs. M. O. Carrick	26 67
	M. O. Chase	18 13
	L. Cresey	20 27
	J. A. Coon	19 47
	T. Collins	15 47
	B. C. Copeland	20 00
	G. G. Cordwell	18 13
	F. Crawford	22 00
	J. W. B. Clement	11 20
	B. Caniff	16 27
	L. B. Crawford	3 73
	T. J. Cook	6 40
	G. W. Capple	20 53
	W. E. Clark	1,497 09
	J. Churchill	6 40
	A. J. Cramer	23 20
	H. Clay	23 20
	M. Cabashere	13 07
	R. N. Chrismand	20 27
	B. Cuff	22 40
	G. W. Campbell	24 00
	M. Covel	18 40
	A. Clarke	533 00
	J. Cornell	71 55
	J. Conley	22 13
	S. Carpenter	260 27
	P. Carmody	7 20
	L. S. Carroll	22 13
	G. P. Clark	21 87
	W. Collins	300 50
	I. S. Cook	72 50
	A. W. Caldwell	300 00
	P. Clark	5 33
	M. F. Currier	16 00
	J. H. Clements	35 40
	J. C. Collier	17 33
	A. E. Cowles	803 20
	F. Cook	13 33
	G. Crow	1,099 85
	W. E. Cunningham	19 20
	C. L. Calhoun	21 33
	M. Cox	21 33
	L. Cruise	20 31
	J. Cochran	18 40
	C. D. Carlton	23 20
	R. F. Christy	24 80
	S. Cartwright	120 00
	J. A. Coons	53
	Kate Curtis	16 80
	H. J. Caple	7 25
	Carried forward	69,423,767 36

1883-'84. INTERIOR—PENSIONS.

Army pensions, 1884—Continued.		
Brought forward	$69,423,767	36
To J. A. Crowell	22	40
M. J. Conklin	9	87
J. H. Crawford	37	80
J. Carns	16	00
M. Calvin	14	13
J. Cinnamon	971	20
R. Carey	15	47
L. Callinton	28	80
E. A. Chubb	9	60
C. B. Cressey	21	33
C. C. Courtney	355	25
M. Cady	1	33
A. Cantrall	21	87
R. B. Carson	19	73
J. C. Gollier	23	47
E. Carter	21	87
I. S. Cook	1	33
H. A. Coady	14	90
P. Conklin	24	53
J. Clemens	20	53
G. Chambers	9	60
C. Cutting	2	40
F. L. Camier	22	93
J. Chitwood	18	93
L. Al. Crill	9	33
P. F. Chase	41	00
D. Chapin	21	33
C. C. Cole	6	93
J. H. Chamberlin	24	00
R. F. Crosby	17	60
M. F. Childress	22	93
Tempy Crossey	17	87
R. A. Cook	16	00
M. Chippendale	8	00
J. A. Cadmus	23	20
W. B. Cussy	24	53
M. E. Corn	24	27
M. G. Coward	21	33
W. H. Cook	23	47
W. A. Currier	1,958	13
J. Cox	20	27
H. D. Casey	22	40
T. Crandall	12	53
J. Caddes	21	33
F. F. Clapp	25	07
E. W. Conant	24	00
L. Clifton	20	27
T. A. Crain	19	73
I. L. T. Clark	29	00
J. H. Chambers	26	67
A. T. Cowgill	22	93
C. Canning	50	43
M. C. Cart	36	00
M. Coyle	15	73
E. Contnor	6	93
E. T. Canon	13	87
W. H. Chase	7	20
B. Coleman	3	00
T. J. Crabtree	22	40
J. A. Crickmuse	510	67
W Coates	14	67
B. F. Craig	20	27
T. M. Conway	40	00
J. B. Chambers	23	47
E. W. Dean	21	87
E. Doherty	13	33
L. Denman	16	80
J. H. Doud	15	47
W. Dreager	18	55
S. B. Dimmick	14	93
E. Despeaux	17	60
H. Dougherty	200	48
L. M. DeWitt	131	86
C. D. Diamond	20	53
J. C. Danielson	77	33
C. H. A. Davis	1	60
J. Demott	188	00
E. M. Dennis	22	00
J. P. Davis	16	53
Est. C. H. Doolittle, dec'd	27	00
J. W. Dyer	12	67
Carried forward	69,429,557	94

Army pensions, 1884—Continued.		
Brought forward	$69,429,557	94
To M. E. Day	10	40
S. Davidson	7	47
Mrs. S. Durkee	23	20
W. Dwyer	15	20
S. Duffie	1	07
G. A. Denman	4	27
S. R. Dewster	17	60
L. Daniel	4	00
W. H. Dunphy	97	87
H. Davis	2	13
M. A. Doran	8	53
D. Dougherty	21	60
P. Daniels	23	20
L. F. Doolittle	15	47
A. Derby	18	93
W. P. Donohoo	21	07
J. E. Durand	26	65
M. Dickerd	14	40
D. J. Dixon	17	60
G. Duckworth	23	47
L. M. Davenport	18	67
A. H. Donaldson	21	60
Sister Desideria	21	33
T. G. Davis	15	47
W. Devlin	24	27
J. Duke	544	00
W. T. Denning	22	67
M. M. Davis	32	00
J. Dennis	949	60
J. L. Dorset	17	50
J. A. Davison	20	20
J. Dunham	20	27
W. Davis	17	60
S. S. Dunn	11	20
W. R. Dyer	21	71
Ann Drew	14	40
Mrs. M. Davidson	11	20
C. Englehardt	54	40
C. Emons	14	67
J. M. Emerson	22	67
H. Eckert	24	00
H. Every	18	13
L. H. Eldred	10	13
M. Edgan	6	40
W. T. Eglin	13	07
A. B. Ellsworth	30	40
E. A. Evans	20	80
F. Eichler	20	27
M. Eanes	21	60
S. Evans	5	60
C. Ent	362	13
T. Edwards	18	67
A. Edgar	12	27
A. B. Enty	23	47
A. Eisenring	129	00
E. S. Ester	16	80
A. Ehrhardt	10	67
M. A. Eade	12	27
J. M. Fry	13	50
L. S. Freeman	23	20
F. Folts	11	47
A. Funk	17	07
A. Fuller	21	33
L. Fox	10	13
G. W. Fraker	333	50
N. J. Freeland	13	87
M. Foley	18	13
P. Farley	24	27
G. Findlay	12	00
J. Ford	286	00
E. G. Ford	17	87
B. F. Fox	13	87
S. Ford	1	60
E. Foland	11	47
B. French	15	47
G. W. Folds	22	13
P. Flanigan	11	47
R. Furbush	23	47
M. Fish	22	13
J. H. Fuller	22	00
C. Ferguson	22	67
Carried forward	69,433,531	80

Army pensions, 1884—Continued.	
Brought forward	$69,433,531 80
To F. L. Furguson	16 53
Z. A. Fraser	13 07
C. Fredenburg	23 47
J. Fetters	27 20
J. W. Floyd	23 73
J. J. Flynn	10 40
R. H. Fillmore	21 87
L. W. Fox	52 80
S. Farrar	13 60
H. Fealty	21 60
W. Frith	28 53
J. Fletcher	1,441 65
F. W. Flamner	17 07
A. Forsyth	21 33
P. Furlaw	24 27
M. Flynn	23 00
Jane Fry	22 13
C. L. Foster	14 40
M. Gardinner	20 27
R. M. Goff	18 67
C. Gillespie	26 13
A. Goodson	20 80
M. J. Glenn	763 87
J. H. Gardner	31 47
W. Gerber	8 53
H. Grant	27 20
E. M. Gilbert	388 00
O. L. Graves	23 73
A. Gaspar	752 00
M. A. Gano	15 47
J. L. Good	8 40
M. H. Gidley	15 73
O. Garity	1,145 73
J. Gray	1 87
W. Gleason	17 07
M. P. Gray	16 27
C. E. Goodrich	13 60
J. Goudy	1 00
E. Greene	23 73
J. T. Green	24 00
J. Griffin	20 67
A. R. Goss	24 53
C. Gleason	57 88
G. H. Gould	8 53
A. F. Gifford	17 07
N. Gould	13 60
T. L. Green	21 07
N. J. Grover	8 80
S. J. Griffing	13 33
C. M. Gatchell	47 80
W. S. Gavitt	173 33
A. F. Gallaway	7 20
A. M. Grose	10 67
E. J. Grimes	23 47
B. Goldsmith	16 00
A. F. Gibson	19 73
J. Glover	20 27
J. L. Griffin	19 47
B. Gray	15 20
E. F. Gadsby	11 20
W. F. Gorham	23 20
M. A. Galbreth	21 07
M. Gordon	17 60
J. Gallagher	33 60
J. S. Goodwin	80 85
M. Gordon	60 80
D. Gearheart	3 20
J. Greyson	73 00
M. C. Gurnsey	22 50
T. M. Gossetts, Kennett, Dunklin & Co	12 16
F. Geis	18 93
M. A. Goldsmith	20 53
J. C. Gruar	13 10
M. Goins	13 00
C. C. Gardner	22 67
S. D. Graves	18 13
C. Greetzler	21 33
R. Goodall	14 67
J. E. Gardner	1 60
G. Gross	3 73
Carried forward	69,439,757 48

Army pensions, 1884—Continued.	
Brought forward	$69,439,757 48
To E. Gault	17 60
A. E. Garcia	2 13
P. Grieff	1,583 00
M. P. Goodridge	14 40
J. A. Gleon	1 60
L. E. de Hart	23 00
A. N. Hovey	14 40
R. Hayden	86 13
C. A. Hearn	12 27
J. Hanigan	16 27
A. Heatly	19 47
A. Herbst	21 87
W. H. Hightower	44 17
S. Hohenshil	22 40
H. Hafner	25 07
R. Hoyt	14 40
A. Hodgkins	91 47
M. Holton	14 93
H. Hall	38 00
W. Hinchman	21 20
C. G. Hookey	23 73
P. Herbest	55 29
W. I. Hutchens	23 47
R. S. Hinckley	20 53
J. J. Hockenjos	20 00
T. Hoeflich	24 80
G. S. Hemunway	18 13
M. C. Hoffman	12 80
D. Harvey	40 00
B. Higgins	20 00
P. C. Howard	8 80
C. Z. Haskell	63 39
E. S. Hutchins	24 00
J. Hossler	21 87
L S. Hutchins	23 73
H. Hebing	1 07
T. L. Herbert	1,479 00
A. Hale	17 60
C. W. Herring	23 20
L. Horton	24 00
E. J. Howard	22 13
R. M. Howard	453 00
M. Holland	21 87
Ha-la-ta-Fix-e-ko	147 73
J. Hurd	16 00
Harriet Hix	24 00
H. D. Hill	19 47
F. M. Harrison	20 27
M. Hay	12 00
R. S. Hines	15 73
M. A. Hubbard	23 47
J. Hummer	6 67
G. W. Henry	15 20
E. A. Houghton	12 27
Eva Hutter	16 27
W. Haberer	10 40
B. Horn	10 40
M. V. Haring	672 00
M. Haward	351 80
M. A. Hubbard	13 07
W. Holmes, jr	19 47
W. H. Hoover	92 80
L. Howe	9 87
E. B. Hough	13 87
J. A. Hollinger	23 73
S. S. Hall	16 80
A. Homan	14 67
H. Hall	20 27
Kate Hanshaw	20 00
H. P. Hart	13 50
H. L. Hopkins	18 13
C. O. Hilton	16 53
E. A. Hennessy	19 20
G. Hoke	22 40
J. Hunt	132 00
P. Heal	10 13
A. D. Hatch	13 33
G. Hardy	7 47
R. Humphreys	5 87
G. W. Hurd	8 00
O. F. Hussey	21 33
Carried forward	69,446,189 79

Army pensions, 1884—Continued.		
Brought forward	$69,446,189	79
To A. E. Hurbert	48	50
I. L. Hedges	70	00
H. S. Howell	117	33
E. Harmon	19	73
E. Harris	18	13
E. Hagerty	11	20
Jennie Hatch	13	60
L. D. Hatfield	9	60
H. Harding	143	50
Mary Hull	4	27
T. Hall	13	85
R. Hathaway	13	07
A. J. Harriman	31	50
J. Hodgdon	21	60
E. Hurlburt	21	87
M. Heald	12	00
J. D. Herrick	13	07
J. Hughes	3	33
S. J. Hull	39	00
L. Hicks	13	87
R. Hornbrock	8	00
B. S. Irving	23	33
R. S. Imbric	1	07
V. D. Irish	14	67
J. E. Inskeep	24	27
D. W. Johnson	17	33
L. L. Johnson	48	73
J. C. Jordan	12	53
C. P. Jolly	389	00
Anna Jones	21	87
M. M. Jenkins	18	40
Sophronia Johnson	20	00
A. Johnson	24	00
L. Jackson	10	67
R. Jackson	17	33
E. Johnson	7	60
Mrs. C. O. Jones	20	53
A. M. Jones	19	20
M. Jones	23	47
T. Jimeson	19	30
M. Jeffries	18	40
V. M. Jones	1,200	00
A. Jelicke	28	08
J. C. Johnson	15	47
E. Jackson	20	00
W. A. Johnson	14	13
W. Jahn	8	00
J. S. Johnston	22	93
M. Johnston	23	47
B. T. Jones	21	07
D. Johnson	10	67
A. S. Jaquith	21	07
T. Jackson	16	00
R. Jobe	20	00
W. Jackson	19	00
H. A. Johnson	24	27
J. W. Jaques	5	87
M. Knowlton	8	53
A. Ketchum	1,526	37
L. Krons	16	53
P. Kane	35	20
M. Kelly	21	07
J. W. King	19	20
D. Keithly	25	87
C. F. Koenig	15	73
G. Kutel	17	33
M. J. Kennedy	20	27
A. W. Kirby	18	93
O. C. Kittredge	12	00
S. Kitchens	75	00
L. King	22	00
M. D. Krieger	17	33
J. Kelly	22	40
A. Kuepper	14	40
J. L. Koone	16	80
J. Knapps	120	00
A. Koons	248	30
L. K. Kilburn	1	07
J. F. King	23	73
Mrs. A. N. Kinney	4	53
S. M. Keene	18	93
Carried forward	69,451,380	06

Army pensions, 1884—Continued.		
Brought forward	$69,451,380	06
To T. M. Kelly	17	33
C. Keppler	22	40
G. W. Keith	24	27
M. A. Kincaid	8	53
D. Krause	11	47
J. Kennedy	19	73
J. R. Key	15	47
B. Knowles	22	40
W. H. Knapp	18	13
E. Keating	16	80
J. G. Kratz	16	27
B. E. Kimball	1,422	00
J. Killmer	20	53
J. J. Keating	21	50
J. S. Kellogg, deceased	10	00
M. Kelly	18	93
C. Kirshoff	2	13
E. Kerns	139	73
S. Lockhart	1	60
C. E. Land	28	90
R. C. Lancaster	6	93
J. Laughrey	22	13
T. Lawrence	65	33
B. F. Leonard	23	47
S. Ludington	4	53
F. P. Leple	43	50
A. P. Littlehale	22	40
W. R. Luce	21	87
E. W. Laird	26	13
C. W. Lane	22	13
R. T. Lillie	139	20
J. J. Lewis	16	27
L. M. Lacy	17	00
W. H. Lee	11	47
W. H. Loveland	118	33
M. L. Langdon	10	40
J. Lindsey	13	33
M. Little John	188	85
J. Lumsford	9	07
A. Lamb	44	80
S. Lindey and R. Gaghagan	23	47
C. E. Loomis	8	00
S. E. Lingenfelter	13	60
T. M. Lane	9	60
M. J. Luce	24	80
J. Lusk	17	07
E. M. Lucas	13	07
E. E. Lane	13	07
A. Leonard	26	00
T. Lewis	21	87
E. J. Laughlin	530	00
S. Lawson	13	60
R. M. Lapham	10	67
A. Lamerand	20	27
W. H. Lord	146	00
M. E. Lynch	24	53
W. Lamson	44	00
M. Lamb	22	67
M. S. Lawrence	16	27
J. M. Lair	12	53
C. M. Leake	85	60
D. Leavine	10	93
R. Long	23	73
L. Long	23	20
W. H. Leibrick	16	53
M. E. Lamb	24	00
C. Liburn	11	47
E. S. Langford	7	47
W. R. Lloyd	26	67
J. Leslie	16	80
A. Lee	118	00
L. Morey	16	27
S. Morgan	11	73
M. McNally	10	40
S. McDonough	10	13
L. E. Manley	16	00
N. E. Merrill	11	47
S. H. Miller	23	73
F. M. Moles	7	73
E. B. Mathews	9	87
E. N. Meggier	21	07
Carried forward	69,455,579	21

Army pensions, 1884—Continued.

	Brought forward	$69,455,579 21
To	J. A. Moore	5 33
	E. J. Martin	2 67
	G. T. Munell	88 00
	M. McGinnis	23 47
	W. R. Morrow	18 67
	W. L. Miller	38 40
	J. E. Mansfield	12 27
	A. B. McCuron	31 75
	S. McConnell	21 33
	J. T. Mouchett	5 60
	L. J. McCreary and J. F. Werntz	600 00
	A. Martin	10 40
	W. Madden	16 27
	E. B. Mayo	17 33
	L. Miller	13 60
	J. B. May	22 40
	M. Moore	36 67
	T. L. McLenden	21 25
	I. T. Merry	169 00
	W. J. Magee	91 67
	E. Miller	23 47
	S. McWhorter	23 47
	Moffatt & Sons	18 00
	G. A. Moss	20 53
	F. E. Mullins	14 93
	J. McLaughlin	45 95
	L. E. Metcalf	907 60
	B. McErlane	20 80
	N. Moore	40 80
	R. Meice	21 33
	M. McMahon	21 93
	G. C. McCutchins	46 93
	H. Miller	14 40
	J. E. McGirsty	588 00
	L. McCarty	9 60
	E. McGahey	10 93
	D. G. McNamara	36 00
	N. E. Maynard	387 34
	B. F. Mills	93 00
	J. Merb	15 47
	J. Mitchell	14 93
	T. McDowell	17 60
	N. W. Maple	24 53
	Mrs. A. C. McConnell	48 17
	J. S. Monroe	17 85
	H. E. Markham	16 53
	J. McWhorter	18 67
	L. R. Murray	23 73
	T. N. Morie	12 80
	W. G. Murphy	19 75
	W. Mulligan	17 87
	P. Murphy	12 27
	M. L. Macomber	1,094 07
	G. W. Manville	15 47
	Mrs. A. M. Kinney	49 60
	A. Melcher	485 33
	F. A. Morris	7 47
	J. H. Morrison	14 13
	M. McCaffrey	18 13
	M. Muir	28 27
	L. W. Meade	21 87
	T. McCarthy	20 00
	H. McErlain	18 67
	O. McNeal	15 73
	J. Meadows	18 40
	M. Miller	22 67
	Mrs. M. McKeon	25 07
	W. H. Mills	8 80
	A. W. Mudge	42 13
	L. A. Miller	26 40
	G. L. Maynard	21 87
	W. Mensing	18 93
	J. F. Morris	30 13
	J. Moore	11 47
	F. Manson	20 00
	H. Martin	23 20
	R. Mills, jr	24 53
	J. Monaghan	34 33
	J. R. Moore	14 13
	C. E. May	14 67
	Carried forward	69,461,575 94

Army pensions, 1884—Continued.

	Brought forward	$69,461,575 94
To	A. McDougall	23 59
	J. McCormick	23 47
	H. Miles	12 53
	J. Martin	10 93
	J. C. Moorehead	13 71
	E. McKeever	307 50
	J. H. McCausland	16 27
	W. B. McComber	36 00
	J. H. Miller	21 33
	H. K. Morgan	20 27
	A. W. Mudge	12 00
	M. T. Mays	15 47
	T. McFaddin	10 13
	I. J. Metcalf	15 47
	J. B. Munsey	14 67
	C. O. Marsh	20 50
	B. Martin	9 87
	H. M. Miller	32 00
	J. Monday	23 73
	P. Moran	53 60
	J. H. Myfield	5 60
	J. McCarthy	18 40
	E. McQuillen	44 34
	S. Maxwell	16 20
	A. E. Monroe	29 87
	S. Moseley	494 40
	G. Morgan	115 43
	F. Merrick	16 50
	E. Morris	816 00
	G. B. Macarta	15 47
	J. A. Mann	10 40
	M. Mahady	7 47
	A. McCormack	25 00
	W. Nosset	20 00
	E. Newhart	5 53
	J. R. Nickel	16 00
	J. Naughton	24 27
	E. C. Neal	16 00
	P. I. Neefus	22 13
	F. E. Noyes	16 53
	G. M. Nichols	18 67
	M. J. Nunnenmaker	16 50
	E. C. North	22 67
	C. Neal	9 40
	T. E. Nute	17 87
	J. Neff	17 07
	J. P. Neal	17 50
	G. Nihiser	20 00
	W. O. Newman	25 33
	W. C. Nicholson	382 30
	A. L. Nichols	31 47
	S. Nelson	16 27
	A. R. New	25 07
	C. O. Reilly	15 20
	M. O. Neil	10 53
	G. Oldenburg	2 53
	J. C. Orne	339 15
	C. B. Oakes	16 27
	R. Ourbler	21 87
	E. Quinn	348 80
	J. Oliver	16 27
	C. T. Onsley	21 33
	O. Oliver	18 13
	F. Ormestutz	13 40
	A. G. Ogilby	90 00
	C. Ohr	15 73
	C. O'Brien	21 60
	W. Otterway	18 67
	J. Pross	49 87
	E. Paulin	19 73
	C. Prentiss	24 00
	O. Phillips	21 07
	W. H. Perkins	5 87
	W. H. Pells	18 93
	G. Plotnar	14 40
	C. P. Painter	13 60
	D. Pickney	14 93
	J. A. Phillips	21 87
	H. J. Page	23 20
	J. H. Harshley	19 47
	O. Purvis	108 75
	Carried forward	69,465,949 81

Army pensions, 1884—Continued.

	Brought forward	$69,465,949 81
To	W. L. Prim	9 87
	C. H. Pond	8 27
	F. Plesse	29 87
	S. C. Parker	33 60
	E. Pritchard	5 87
	H. E. Paulding	14 10
	T. C. Price	21 33
	H. C. Phelps	156 53
	G. W. Page	13 00
	I. B. Prescott	18 13
	M. Parker	16 53
	M. Peabody	15 73
	G. F. Pillsbury	16 27
	M. Palmer	33 60
	I. Plummill	9 07
	C. P. Pierson, deceased	21 00
	S. Perkins	12 27
	S. A. Pusey	31 00
	N. M. Page	5 93
	M. A. Parkin	17 07
	J. F. Palmer	16 80
	E. N. Phelps	1,143 16
	J. S. Pike	1,438 53
	C. J. Pride	22 67
	C. M. Paul	6 93
	J. M. Preston	10 67
	C. Pratt	9 60
	J. H. Palmer	15 00
	W. T. Price	8 00
	R. Porsch	28 33
	J. M. Pomer	15 73
	P. Philley	22 13
	J. V. Perrin	23 47
	G. M. Pettit	24 00
	G. E. Prage	14 67
	M. C. Parham	16 00
	B. Pearch	53
	J. L. Powell	27 20
	J. S. Poore	23 47
	C. T. Potter	10 93
	O. B. Patterson	79 00
	C. B. Pitcher	8 53
	W. Potter	20 80
	M. A. Paine	8 27
	E. B. Peck	24 00
	A. G. Pratt	567 10
	E. A. Proctor	70 00
	J. R. Philbrick	19 00
	A. H. Polk	388 75
	M. C. Pettit	16 00
	Rachel Penick	21 60
	H. Palmer	14 00
	G. Philbrick	22 00
	E. H. Quinley	10 67
	C. Rogers	12 27
	A. Reames	7 45
	J. D. Rockafellow	24 00
	R. Robotham	567 50
	M. A. Rankin	16 53
	E. M. Ritchie	4 27
	J. Roberts	20 80
	H. R. Ryan	2 40
	E. Ressell	12 27
	J. F. Rand	20 80
	S. Rodgers	16 00
	F. J. Raye	22 93
	B. Roney	3 73
	H. Russell	7 73
	J. H. Riling	18 93
	W. W. Roberts	30 50
	M. Richards	3 47
	J. M. Rice	19 47
	F. D. Ransom	8 80
	B. S. Reed	24 53
	W. Rhoads	45 04
	J. Routzon	10 40
	W. Raper	20 00
	W. Rittler	12 00
	A. R. Rohobach	148 00
	R. Ramsey	23 47
	S. A. Russell	51 33
	Carried forward	69,471,741 01

Army pensions, 1884—Continued.

	Brought forward	$69,471,741 01
To	E. Ramsburg	22 93
	J. Riley	12 80
	C. Robinson	17 87
	J. M. Rinehard	22 67
	F. D. Rohrer	10 13
	J. N. Richardson	23 47
	M. O. Roue	12 80
	R. A. Ross	21 00
	E. Rodeffer	36 53
	J. F. Robbins	484 67
	M. Reilly	19 20
	Rachel Rutledge	18 40
	J. W. Regan	18 93
	W. D. Ritter	13 87
	J. M. Rice	21 07
	E. A. Richardson	15 47
	S. C. Riggs	18 67
	N. M. Reid	14 40
	A. Regan	11 47
	L. Rose	8 27
	M. Robbins	10 93
	J. Rogers	57 33
	J. T. Ramsey	11 40
	Mrs. H. Rice	16 53
	Miss Olive Robb	42 67
	M. H. Rouke	18 00
	S. Reeb	131 50
	E. G. Roundy	15 20
	H. Roberts	13 60
	J. E. Russell	12 80
	Ann Ronan	3 47
	J. Robinson	3 20
	J. E. Ritchie	49 00
	W. Ronan	18 93
	M. A. Remick	28 00
	D. Richey	25 43
	W. H. Riley	21 60
	Mary A. R	9 07
	A. D. Richards	19 20
	D. Ragins	60 80
	J. W. Richards	191 00
	C. W. Reed	12 00
	W. Rippon	16 27
	J. Stephen	191 20
	J. E. Sanborn	14 40
	I. Shaw	12 53
	J. J. Smith	20 80
	W. M. Stockwell	2,494 82
	H. P. Scott	644 00
	I. W. Sayer	6 13
	J. W. Sweet	16 80
	E. J. Suber	18 93
	M. Sullivan	20 53
	M. Sigfried	18 93
	Kate Salterlee	1 87
	A. F. Shedd	23 20
	J. R. Stevens	20 00
	O. Sanborn	304 73
	D. W. Severance	19 73
	S. S. Short	16 80
	E. Smith	23 73
	B. Steiner	19 20
	D. Sisson	23 47
	A. B. Somers	15 40
	B. Stevens	144 68
	R. Sanderson	15 47
	J. Smith	8 53
	E. M. Stowell, administrator	18 40
	S. Sampson	15 20
	J. Swan	12 53
	W. N. Seay	13 87
	P. Sharkey	12 53
	J. Sullivan	311 60
	J. Stine	21 33
	W. G. Sargent	9 33
	C. W. Scott	21 07
	J. B. Stafford	313 60
	H. H. Stiles	8 53
	J. B. Stroh	626 25
	E. J. Smith	25 07
	F. B. Smith	14 67
	Carried forward	69,478,873 32

Army pensions, 1884—Continued.

	Brought forward	$69,478,873 32
To	S. M. Sturtevant	17 87
	H. C. Smith	21 07
	W. F. Storey	851 40
	A. F. Seavey	23 20
	K. E. Sloan	18 13
	E. Steiner	194 13
	A. D. Shepard	19 47
	W. Spengler	24 27
	M. A. Sheridon	15 47
	H. Schultz	23 47
	J. S. Skillman	80
	L. R. Snider	80
	C. Stafford	23 73
	M. L. Sanborn	23 47
	L. Smith	21 33
	F. Schling	10 13
	W. J. Shaffer	39 00
	M. B. Swanger	20 00
	T. Salter	221 25
	A. Stilzger	966 93
	J. W. Smith	22 40
	G. W. Stout	16 27
	E. Scheurer	19 73
	S. Sudborough	5 07
	F. M. Sears	21 07
	F. M. Staples and J. R. Philbrick	39 20
	T. Smith	14 13
	S. Stryker	18 67
	A. Smallwood	6 67
	J. Stone	20 00
	C. C. Smith	16 53
	G. H. Steel	3 47
	C. Stein	23 20
	H. C. Sanders	22 67
	M. E. Smith	17 87
	B. M. S. Shaw	86 13
	J. H. Stinson	23 47
	J. H. Schoolcraft	1 33
	M. Shepard	17 60
	A. Sears	14 40
	J. H. Sperry	14 93
	A. Van Sickle	18 93
	C. Sherwood	15 20
	A. W. Shaffer	886 81
	Mrs. S. A. Sanderson	832 00
	N. B. Stone	50 00
	C. Schall	19 47
	B. M. Stoner	12 00
	J. Sproul	129 07
	A. Stroud	4 00
	M. A. Shepherd	17 87
	N. Strong	11 20
	M. J. Sturgis	957 50
	H. P. Shray	91 20
	M. M. Speer	12 00
	W. A. Sweet	895 47
	W. W. Stidham	16 00
	N. Stoner	23 47
	P. Schrieber	21 60
	J. Smith	17 87
	C. Stuart	22 67
	M. Sidner	40 00
	J. Sexton	22 67
	R. R. Smith	21 87
	J. J. Sullivan	21 07
	R. T. Starr	35 33
	J. Seymour	8 00
	B. Small	14 93
	C. Slough	13 60
	H. M. Stearns	23 20
	P. G. Shaw	18 93
	C. Slack	10 13
	M. Slack	59 20
	J. Sparr	24 00
	C. Smith	13 33
	W. L. Selman	20 53
	S. A. Scammon	47 47
	C. Starin	22 13
	A. Schaefer	20 53
	C. A. Strack	18 67
	Carried forward	69,486,343 97

Army pensions, 1884—Continued.

	Brought forward	$69,486,343 97
To	C. Smith	14 93
	M. Staring	22 13
	E. Schank	16 80
	J. Shepherd	21 87
	J. M. Sadler	23 73
	M. E. Short	12 53
	A. J. Seay	17 87
	A. Stark	23 47
	T. E. Simmons	10 80
	P. Saffell	1,873 33
	H. H. Sawyer	16 53
	A. F. Sanborn	16 00
	T. H. Stager	12 53
	B. F. Sutton	33 33
	E. S. Stubbs	12 27
	M. Toll	13 87
	D. Thompson	1 07
	R. Thompson	49 07
	J. Thompson	9 87
	E. M. Tibbetts	23 47
	R. Tohey	22 93
	G. Thatcher	18 13
	P. Theobold	15 73
	L. R. Tillman	26 67
	J. Tacker	4 53
	M. Todd	135 00
	D. A. Thomas	19 73
	A. E. Thomson	15 73
	R. S. Turner	25 00
	M. E. Twining	19 47
	Trustees of Montoen Hospital, Frederick, Md	17 07
	J. L. Tallant	21 33
	S. L. Tiffany	16 80
	J. Taylor	47 03
	M. Tuttle	33 00
	T. W. Temple	91 50
	S. W. Tompkins	19 73
	W. H. Tucker	12 80
	A. Terwillinger	1,222 15
	C. H. Thurlow	22 93
	E. J. Thacker	16 27
	C. H. Thompson	12 27
	A. J. Thomas	17 87
	G. Tibballs	526 17
	E. Templeton	105 33
	W. Tripp	177 50
	C. Tessin	73 33
	W. W. Trombly	14 40
	I. O. Thompson	19 20
	D. Taft	22 13
	C. H. Tuxbury	44 67
	J. Trask	19 47
	M. Thompson	265 87
	J. R. Tucker	16 80
	J. Taylor	13 33
	J. J. Taylor	16 00
	G. P. Tuttle	10 67
	A. H. Thomas	23 73
	R. B. Tebbitts	16 80
	L. Tilton	718 13
	F. K. Tracy	42 67
	E. Taylor	26 93
	D. Tomney	37 50
	M. M. Tull	10 67
	H. Thurston	8 53
	S. E. Thomas	18 67
	A. J. Townsend	118 50
	D. Thiesz	1,020 98
	G. Truax	22 13
	A. B. Throop	18 40
	A. Terwillinger	76 27
	S. Van Sickel, jr	37 33
	A. E. Udell	21 07
	E. Upham	13 28
	H. Unland	66 67
	J. F. Venalte	1 07
	M. Valentine	39 10
	M. Vankuren	15 47
	S. Vanard	55 20
	I. N. Vaughan	6 50
	Carried forward	69,494,163 58

Army pensions, 1884—Continued.

	Brought forward	$69,494,163 58
To	A. Vansickle	21 07
	A. M. Vance	10 67
	A. Veazie	33 07
	J. M. Van Derveer	9 33
	S. J. Vary	14 13
	C. J. Vaughn	9 33
	C. L. Voorhees	22 13
	A. Whaley	10 40
	R. Ware	126 97
	L. S. Whitcomb	1 33
	W. Wright	1 87
	M. E. Whitcher	17 60
	J. W. Watson	20 80
	T. Walls	17 07
	A. P. Wiley	23 47
	D. W. Wilder	20 80
	F. Wendling	9 07
	J. A. Walker	15 47
	E. Wimo	19 00
	G. Winters	17 33
	H. Wilson	18 67
	C. M. Williamson	24 00
	I. Whitney	20 80
	J. S. Williams	20 53
	G. B. Walbridge	23 73
	O. C. Wickersham	17 87
	E. H. Wheaton	15 47
	A. Ward	17 60
	A. Woodard	9 87
	I. K. Winters	10 40
	A. M. Wright	17 33
	F. Webb	5 33
	A. Wood	1 00
	D. D. Warren	6 93
	J. L. Whittick	22 40
	V. A. Wilson	20 27
	Mrs. H. Weed	8 27
	C. Wilson	27 33
	T. White	8 00
	M. Weyer	1 60
	W. A. Waddell	18 40
	L. C. Wingo	23 00
	J. R. Wooland	21 87
	J. E. Whipple	23 20
	C. Y. Wimple	45 50
	J. S. Weeks	24 27
	Ida M. White	16 53
	G. W. Williams	23 73
	D. Walter	24 00
	M. Weil	21 60
	S. L. Whitehouse	24 00
	E. N. Weymouth	8 53
	J. Wade	27 47
	Mrs. S. Williams	465 50
	R. Warner	20 80
	E. Whitcomb	24 00
	W. Wilson	17 87
	M. A. Webster	13 07
	C. Waltz	14 67
	G. Williams	13 33
	T. Wielder	15 47
	I. T. Wilcox	18 67
	S. West	13 60
	T. Weeks	25 25
	M. M. West	23 73
	M. R. Watts	14 93
	A. P. Waid	13 07
	S. D. Woolford	54 60
	E. Wright	38 13
	M. J. Ward	6 67
	S. E. White	1,412 00
	M. B. Worrell	24 27
	J. N. Worthington	103 50
	W. M. Wetherspoon	22 67
	P. Winder	15 00
	W. H. Wills	17 33
	W. Willis	21 33
	D. Wells	19 73
	H. Ward	834 99
	D. Ward	38 30
	G. N. Wicker	31 00
	Carried forward	69,498,517 47

Army pensions, 1884—Continued.

	Brought forward	$69,498,517 47
To	J. G. Wright	2 70
	S. H. Wheeler	24 53
	M. E. Wilson	9 87
	I. F. White	20 80
	E. J. Wynkoop	14 40
	P. W. Willis	24 28
	D. D. Wright	18 93
	J. Whittingham	20 00
	H. Williams	20 00
	M. J. Ward	16 53
	E. Welch	25 07
	J. Ward	24 27
	E. M. Wasgatt	15 47
	E. C. White	15 20
	S. Walker	11 40
	Mrs. C. Winters	19 20
	E. R. Wethern	15 47
	W. J. Wright	23 47
	P. Williams	17 60
	N. P. Wisnell	18 67
	M. Yale	23 47
	J. W. Yeaton	16 00
	O. E. Yaxley	20 80
	S. Yeaglas	22 67
	H. H. Young	24 27
	W. C. Young	10 13
	R. Y. Young	15 20
	F. Zeppenfeldt	22 67
		69,499,030 54

Deduct repayments:

By	T. C. Acton	$48 00	
	D. T. Boynton	260,441 38	
	H. Cox and one other	02	
	C. R. Coster	20	
	R. Errett	42 25	
	E. Ferguson	24 00	
	T. Gaines	314 70	
	H. H. Gibson	1,581 21	
	F. Knefler	6 00	
	R. M. Kelly	318,332 97	
	T. L. Poole and one other	1,635 53	
	T. L. Poole	1,317,751 99	
	S. Post	96 00	
	Commissioner Pensions	72 00	
	H. G. Sickel	574 60	
	Ada C. Sweet	231 73	
	A. T. Wikoff	893 33	
			1,902,045 91
			67,596,984 63

Army pensions, 1883:

To	J. M. Alsop	15 47
	A. H. Allen	23 73
	M. A. Ahern	7 73
	E. Averitt	24 00
	A. L. Axtell	24 00
	C. Allen	12 00
	D. T. Boynton	1,116 53
	L. Bingham & Co	85 00
	M. E. Bowman	24 00
	D. Ballard	24 00
	F. E. Beck	6 00
	B. Blackman	983 20
	J. Churchill	348 80
	F. Cooley	21 00
	J. Campbell	24 00
	M. Campbell	24 00
	S. Coward	24 00
	S. J. Conquest	24 00
	S. F. Davenport	20 00
	G. W. Dunkel	42 00
	A. M. Folk	24 00
	R. Forbes	24 00
	E. Getman	39 73
	R. Gay	21 07
	Carried forward	2,982 26

Army pensions, 1883—Continued.

Brought forward		$2,982 26
To E. F. Greenwood		14 93
W. R. Gainey		6 93
W. Glove		480 97
J. Hurley		12 27
G. M. Hardy		84 45
L. Horton		16 80
S. Hendren		24 00
W. H. Hillman		6 00
W. A. Herron		666 06
B. F. Hanie		24 00
M. Hamilton		24 00
E. M. Johnson		14 40
G. H. Kimball		24 53
E. A. Liscomb		12 27
S. S. Lankford		9 60
A. Lowry		24 00
S. Long		6 00
J. G. Morrison		8 00
E. A. Moore		24 00
J. F. Martin		24 00
D. L. McQuiston		12 00
E. T. Marshall		24 00
Pleasant Moment		18 00
T. Micheal		54 00
R. McGill		30 00
P. Niles		1,168 28
T. A. Norvell		16 27
W. Nickerson		24 00
P. Norman		24 00
L. A. Pierce		11 20
E. Peabody		11 73
H. F. Prindall		15 72
P. Pratt		19 20
C. Potter		150 93
I. Phillips		24 00
P. Ross		9 33
R W. Rabun		22 67
S. Robinett		24 00
D. Russell		24 00
W. Reed		56 60
A. Reeves		18 00
J. D. Reagan		30 00
T. Reed		24 00
J. M. Shockley		20 80
W. Sheridan		9 60
M. E. Sayers		22 67
J. Shacroy		17 07
Mrs. Frank Smith		11 20
R. B. Seay		24 00
C. M. Seal		24 00
S. Thomas		24 00
E. W. Thomps on		24 00
D. Wootman		12 53
H. R. Williamson		24 00
M. W. Willey		101 07
J. K. Wolfe		16 27
J. Williams		72 00
S. E. Williams		24 00
M. A. Young		20 80
		6,749 41

Deduct from repayments:

By T. C. Acton, assistant treasurer United States	$109 00	
N. A. Adams and one other	433,604 29	
N. A. Adams	833 35	
D. T. Boynton	891,354 18	
C. R. Coster	1,086,120 63	
W. T. Collins and one other	1,317 44	
S. Conner	894,798 41	
H. Cox	45,498 41	
H. Cox and one other	42,541 10	
J. A. Connolly	48 00	
Commissioner of Pensions	1,997 93	
R. Errett	502,462 89	
E. Ferguson	511,996 47	
Carried forward	4,412,682 10	6,749 41

Army pensions, 1883—Continued.

Deduct from repayments:

Br't forward	$4,412,682 10	$6,749 41
By E. Ferguson and one other	10 66	
D. W. Gooch	1,422,735 85	
T Gaines	1,282,746 10	
W. A. Herron	918 06	
F. Knefier	724,581 69	
R. M. Kelly	195,649 70	
T. L Poole	602,383 21	
S. Post	56,920 52	
T. Reynolds	168 00	
J. Rich	722,702 23	
Ada C. Sweet	880,618 50	
H. G. Sickel	1,110,655 92	
A. T. Wickoff	924,736 34	
A. T. Wickoff and one other	25 67	
E. L. Whitford	1,165,114 99	
		13,502,649 54
Excess of repayments		13,495,900 13

Army pensions, 1882:

To L. Bingham & Co	200 00
T. J. V. Brierly	42 00
R. Campion	12 00
A. S. Cameron	54 00
T. Chilcrat	24 00
T. Evans	20 00
W. A. Herron	45 00
Mary Hood	24 00
Estate of Wm. Hightoner	24 00
W. Hull, deceased	10 00
J. B. Hestand	36 00
M. A. Mobley	24 00
J. Richter	18 00
Ellen Regger	24 00
G. A. Wyatt	12 00
W. Worthington	12 00
	581 00

Deduct from repayments:

By T. C. Acton, assistant treasurer United States	$220 00	
D. T. Boynton	155 79	
H. Cox	10 00	
R. Campion	12 00	
J. A. Connolly	96 00	
W. A. Herron	240 00	
E. Ferguson and one other	8 00	
T. Gaines	224 46	
R. M. Kelly	10 00	
F. Knefler	726 98	
S. Post	87 46	
T. Reynolds	672 00	
Ada C. Sweet	5 00	
H. G. Sickel	322 07	
E. L. Whitford	227 40	
		3,017 16
Excess of repayments		2,436 16

Army pensions, 1881 and prior years:

By A. H. Adams	$94 56	
N. A. Adams and one other	47 67	
N. A. Adams	238 67	
D. T. Boynton	219 36	
C. W. Brown	108 10	
Commissioner of Pensions	2,248 78	
W. T. Collins and one other	2,155 15	
J. A. Connolly	1,681 00	
W. E. Davis	308 84	
W. W Dudley	17 20	
R. Errett	65 11	
W. T. Forbes	15,212 31	
E. Ferguson	47	
Carried forward	22,397 22	

Army pensions, 1881 and prior years—Continued.

Brought forward	$22,397 22	
By E. Ferguson and one other	18 00	
W. D. Gallagher	150 00	
R. B. Galusha	27 34	
T. Gaines	574 03	
W. H. Isabelle	89,810 57	
R. M. Kelly	48 00	
F. Knefler	351 60	
C. B. Lines	12 07	
W. H. Lawrence	1,715 52	
T. R. Moseley	40 00	
S. H. H. Parsons	87 92	
E. D. Porter	48 53	
T. L. Poole	33 20	
S. Post	13 66	
T. Reynolds	4,225 36	
Ada C. Sweet	255 02	
H. G. Sickels	284 71	
A. T. Wikoff	69 60	
A. T. Wikoff	13	
J. S. Witcher	8 00	
E. L. Whitford	250 54	
	120,421 02	

Pay and allowances Army pensions, 1884:

To N. A. Adams	19,000 00
D. T. Boynton	2,700 00
H. Cox	7,000 00
S. Conner	10,000 00
C. R. Coster	13,000 00
R. Errett	15,000 00
E. Ferguson	13,000 00
C. R. Foster	10,000 00
D. W. Gooch	15,000 00
T. Gaines	15,000 00
H. R. Gibson	15,000 00
F. Knefler	17,000 00
R. M. Kelly	10,000 00
S. Post	13,000 00
T. L. Poole	25,000 00
J. Rich	17,000 00
Ada Sweet	18,000 00
H. G. Sickel	18,000 00
A. T. Wikoff	24,000 00
E. L. Whitford	13,000 00
	289,700 00

Deduct repayments:

By N. A. Adams and one other	$952 35	
D. T. Boynton	2,010 41	
W. T. Collins and one other	2,400 60	
C. R. Coster	2,016 94	
R. Errett	1 018 07	
E. Ferguson	1,424 15	
F. Knefler	935 55	
R. M. Kelly	588 07	
T. L. Poole	9,110 25	
J. Rich	2,265 16	
H. G. Sickel	3,280 64	
A. T. Wickoff	3,906 15	
E. L. Whitford	600 00	
		30,508 34
		259,191 66

Pay and allowances Army pensions, 1883:

By S. Connor	$174 06
H. Cox	191 11
D. W. Gooche	1,071 40
T. Gaines	785 32
T. L. Poole	694 67
E. L. Whitford	2,241 68
	5,158 24

Pay and allowances Army pensions, 1881 and prior:

By R. H. Isabelle	$1,196 73

Fees of examining surgeons, Army pensions, 1884:

To N. A. Adams	$54,000 00
D. T. Boynton	5,332 60
S. Connor	24,500 00
C. R. Coster	31,000 00
H. Cox	5,000 00
R. Errett	42,000 00
E. Ferguson	30,000 00
D. W. Gooch	34,000 00
T. Gaines	29,000 00
H. R. Gibson	19,000 00
F. Knefler	87,000 00
R. M. Kelly	13,000 00
S. Post	38,000 00
T. L. Poole	48,000 00
J. Rich	43,000 00
Ada C. Sweet	80,000 00
H. G. Sickel	42,000 00
A. T. Wikoff	102,000 00
E. L. Whitford	26,000 00
	752,832 60

Deduct repayments:

By D. T. Boynton	$1 60	
C. R. Coster	4,866 40	
S. Connor	2,944 00	
H. Cox, P. A., and one other	335 63	
R. Errett	2,671 38	
T. Gaines	8,123 00	
R. M. Kelly	90 85	
F. Knefler	3,366 00	
T. L. Poole	560 80	
H. G. Sickel	4,583 30	
A. T. Wikoff	16,297 10	
E. L. Whitford	693 00	
		44,533 06
		708,299 54

Fees, examining surgeons, Army pensions, 1883:

To N. A. Adams	18,000 00
J. W. Brown	11 00
S. Connor	8,000 00
C. R. Coster	11,000 00
H. Cox	1,000 00
R. Errett	13,000 00
E. Ferguson	12,000 00
D. W. Gooch	13,000 00
H. R. Gibson	8,000 00
T. Gaines	6,000 00
F. Knefler	23,000 00
R. M. Kelly	5,000 00
S. Post	15,000 00
T. L. Poole	23,163 76
J. Rich	20,000 00
Ada C. Sweet	25,000 00
H. G. Sickel	14,000 00
E. L. Whitford	8,000 00
A. T. Wikoff	25,000 00
	248,174 76

Deduct repayments:

By N. A. Adams and one other	$9 95	
N. A. Adams	1 00	
T. D. Boynton	40	
W. T. Collins and one other	35	
C. R. Coster	6 86	
S. Connor	148 54	
H. Cox	1 00	
E. Ferguson	75	
D. W. Gooch	2 75	
T. Gaines	484 65	
F. Knefler	82 65	
T. L. Poole	12 55	
Carried forward	751 45	248,174 76

Fees examining surgeons, Army pensions, 1883—Continued.		
Deduct repayments:		
Brought forward	$751 45	$248,174 76
By J. Rich	2 00	
Ada C. Sweet	60	
H. G. Sickel	1 50	
A. T. Wikoff	3 95	
		759 50
		247,415 26
Fees of examining surgeons, Army pensions, 1882:		
To W. W. Shaw, deceased		16 00
Deduct repayments:		
By T. Gaines	$10 00	
H. G. Sickel	2 00	
		12 00
		4 00
Fees of examining surgeons, Army pensions, 1881 and prior:		
By R. H. Isabelle	$866 00	
Contingent expenses of agents, Army pensions, 1884:		
To N. A. Adams		154 67
C. R. Coster		350 00
R. Errett		711 20
E. Ferguson		198 85
D. W. Gooch		446 17
H. R. Gibson		371 66
R. M. Kelly		179 40
T. L. Poole		374 50
S. Post		2 50
J. Rich		663 90
Ada C. Sweet		414 52
E. L. Whitford		1,103 25
A. T. Wikoff		352 57
		5,323 19
Deduct repayments:		
By R. Errett	$153 30	
J. Rich	176 30	
		329 60
		4,993 59
Contingent expenses of agents, Army pensions, 1883 and 1884:		
To C. R. Coster		295 57
R. Errett		153 30
E. Ferguson		50 42
T. Gaines		439 50
H. G. Sickel		238 32
		1,177 11
Deduct repayment:		
By T. Gaines		439 50
		737 61
Arrears of Army pensions:		
To N. A. Adams		5,000 00
T. J. Cook		169 60
J. M. Curry		214 20
W. H. Chase		453 75
E. J. Ferguson		572 41
E. Ferguson		3,000 00
H. R. Gibson		15,000 00
Mary Jones		571 53
L. A. King		145 60
R. M. Kelly		10,000 00
E. S. Langford		82 03
M. Metzgar		222 40
J. Moore		153 53
Mary Moore		603 20
J. T. Morgan		667 30
T. L. Poole		25,000 00
J. Routzon		869 07
J. M. Roberts		86 50
Carried forward		62,811 12

Arrears of Army pensions—Cont'd.		
Brought forward		$62,811 12
To I. W. Sayer		412 87
Ada C. Sweet		10,000 00
J. Seymour		222 50
A. F. Sanborn		84 25
		73,530 74
Deduct from repayments:		
By D. T. Boynton	$1,028 40	
Commissioner Pensions	95 47	
D. W. Gooch	66,956 94	
T. Gaines	169 73	
R. M. Kelly	520 01	
T. L. Poole	13,336 14	
H. G. Sickel	24 93	
A. T. Wikoff	32 13	
		82,163 75
Excess of repayments		8,633 01
Fees for vouchers arrears of Army pensions:		
To H. R. Gibson		10 00
F. Knefler		10 00
R. M. Kelly		5 00
T. L. Poole		5 00
Ada C. Sweet		5 00
A. T. Wikoff		10 00
		45 00
Deduct from repayments:		
By D. W. Gooch	$104 30	
R. M. Kelly	2 40	
T. L. Poole	9 10	
		115 80
Excess of repayments		70 80
Arrears of Navy pensions:		
To C. R. Coster		5,000 00
Ada C. Sweet		5,000 00
		10,000 00
Deduct from repayments:		
By G. W. Gooch	$24,332 55	
W. A. Herron	448 98	
		24,781 53
Excess of repayments		14,781 53
Fees for vouchers, arrears of Navy pensions:		
To C. R. Coster		2 00
Deduct from repayments:		
By D. W. Gooch	$34 20	
W. A. Herron	2 30	
		36 50
Excess of repayments		34 50
Navy pensions, 1884:		
To J. Aitken		13 07
T. H. Blackman		58 93
E. Benham		40 00
C. R. Coster		219,200 00
H. Cox		44,700 00
I. L. Chamberlain		20 53
D. W. Gooch		224,300 00
T. Gaines		199,200 00
M. Gleason		22 40
J. Gallagher		42 40
E. Sagan		72 27
L. A. Flagg		72 50
B. Lednith		16 93
Mrs. Mary Langley		81 67
J. J. Lakin		54 60
Mrs. D. Murphy		47 20
P. Macnamara		46 40
J. W. Owen		51 00
R. Paul		214 25
S. L. Putt		14 67
Carried forward		688,268 82

Navy pensions, 1884—Continued.

Brought forward		$688,268 82
To Ada C. Sweet		84,500 00
M. L. Small		75 00
M. Stanley		44 53
M. Smith		7 73
D. Sullivan		21 60
H G. Sickel		194,200 00
C. L. Twining		78 00
Ellen M. Taylor		29 87
Eliza Taylor		25 07
C. Willis		21 60
		967,272 22
Deduct repayments:		
By H. Cox	$24 00	
T. Gaines	18 00	
Navy Department	570,187 00	
		570,229 00
		397,043 22

Navy pensions, 1883:

To Mrs. H. Arb	33 07
Catharine Cary	5 07
J. Lafayette	66 60
J. E. Mayfield	60 80
R. E. Raymond	50 75
A. M. Thompson	38 67
	254 96

Deduct from repayments:

By H. Cox	$12,609 61	
S. Connor	23,724 69	
C. R. Coster	19,183 10	
T. Gaines	9,967 39	
D. W. Gooch	51,319 70	
W. A. Herron	4,000 05	
H. G. Sickel	16,110 91	
Ada C. Sweet	12,685 13	
		149,600 58
Excess of repayments		149,345 62

Navy pensions, 1881 and prior years:

By D. Blakely	$255 10
H. Willis	1,000 00
	1,255 10

Navy pensions, 1880 and prior years:

To W. C. Townsend	132 65

Pay and allowances, Navy pensions, 1884:

To C. R. Coster	$700 00
H. Cox	100 00
D. W. Gooch	500 00
T. Gaines	600 00
Ada C. Sweet	300 00
H. G. Sickel	700 00
	2,900 00

Pay and allowances, Navy pensions, 1883:

By S. Connor	$55 75
C. R. Coster	227 54
H. Cox	71 42
T. Gaines	104 10
D. W. Gooch	275 55
H. G. Sickel	146 42
Ada C. Sweet	36 66
	917 44

Fees of examining surgeons, Navy pensions, 1884:

To C. R. Coster	2,000 00
H. Cox	300 00
D. W. Gooch	3,000 00
T. Gaines	1,500 00
Ada C. Sweet	2,300 00
H. G. Sickel	2,000 00
	11,100 00

Fees of examining surgeon Navy pensions, 1883:

By S. Connor	$3 00
C. R. Coster	21 00
H. Cox	14 00
D. W. Gooch	217 10
T. Gaines	41 50
W. A. Herron	8 00
H. G. Sickle	111 72
	416 32

Payment to B. A. Shephard for lost check of R. S. Neighbors, 1873 and prior years (transfer account):

By Interior Department	$599 66

Relief of Mary L. Walker and Ella Walker:

To Mary L. and Ella Walker	1,858 50

MILITARY ESTABLISHMENT.

Pay of the Army, 1880 and prior years:

To I. O. Dewey, major	$118 64
W. M. Maynadier, major	120 64
A. Murry, captain	3,531 11
J. G. Ramsey, captain	5 55
	3,775 94

Pay of the Army (transfer account):

To E. E. Ames	98 79
G. L. Browning	28 43
L. A. Chamberlain	507 07
G. C. Cram	43 40
G. W. Chilson	31 06
G. W. Cradelbaugh	248 48
L. Clarke	6 00
C. N. W. Cunningham	13 96
S. P. Ferris	4 39
Carried forward	981 58

Pay of the Army (transfer account)—Continued.

Brought forward	$981 58
To C. H. Ingram	215 60
J. A. Irwin	16 00
J. T. Kirkman	81
J. Lawson	1 73
A. Murry	205 91
M. R. Marston	50 25
E. M. Sweeny	6 00
O. M. Poe	134 69
J. G. Ramsey	2 65
I. W. Starr	43 10
J. T. Sprague	56 25
F. Schwatka	40
G. W. Schofield	1 50
T. F. Tobey	162 26
N. Vedder	246 75
A. O. Vincent	1,829 28
C. I. Wilson	114 08
War Department	40 98
Carried forward	4,109 82

Pay of the Army (transfer account)—Continued.		
Brought forward		$4,109 82
Deduct repayments:		
By J. M. Ingalls	$6 39	
F. Schwatka	40	
J. D. Wilkins	10 75	
		17 54
		4,092 28
Pay of the Army, 1881 and prior years:		
To J. N. Allison		44 11
D. B. Atwood		5 45
W. Amman		104 67
M. L. Allen		48 01
A. L. Anderson		170 58
T. B. Briggs		46 44
A. E. Bates		204 03
O. B. Boyd		108 18
E. Byrne		249 33
J. M. Burns		1 00
G. L. Browning		4 56
A. B. Carry		125,000 00
L. A. Chamberlain		404 91
D. L. Craft		5 20
W. Clifford		176 33
L. M. Carpenter		22 50
G. W. Chilson		297 18
G. W. Cradelbaugh		1,554 99
Luke Clark		1,201 55
C. N. W. Cunningham		82 59
H. H. Crews		15 14
I. O. Dewey		62 29
T. J. Eckerson		575 15
P. H. Ellis		200 51
G. L. Febiger		307 66
F. H. Ferris		287 76
W. C. Forbush		64 10
C. C. Gilbert		124 07
S. E. Gittings		846 59
R. T. Gordon		218 63
J. M. Gore		50 76
P. G. Hall		388 64
J. Harris		5 17
Jno. Hamilton		36 00
N. Hedberg		90 22
W. J. Hiss		514 55
Louis Heist		38 37
W. C. Hemphill		91 97
J. A. Irwin		61 43
J. M. Ingalls		6 39
W. H. Johnston		444 65
E. D. Judd		494 89
C. S. Lovell		6 25
S. A. Lawson		390 27
A. Murry		405 00
J. S. McLain		50 97
W. M. Maynadier		66 53
J. McGilvray		33 12
R. B. Moffett		6 00
M. R. Marston		7 74
E. McSweeny		1 77
D. Monahan		62 66
J. C. Mallery		1 05
H. E. Noyes		293 65
J. H. Nelson		1 32
M. L. Ogden		53 52
J. B. M. Potter		398 03
J. Pitcher		32 50
J. R. Roche		22,000 00
G. B. Rodney		350 44
J. M. Starr		62 75
R. Smith		293 57
F. Schwatka		45
Soldiers' Home		977 70
H. Seton		41
W. N. Sage		140 90
C. B. Schofield		534 57
G. R. Smith		84 90
I. H. Tobey		64 80
N. Vedder		249 77
Carried forward		161,227 19

Pay of the Army, 1881 and prior years—Continued.		
Brought forward		$161,227 19
To J. T. Wirkman		285 95
S. L. Wright		439 32
J. F. Weeds		230 53
C. I. Wilson		24 38
War Department		2 31
		162,209 68
Deduct repayments:		
By W. Arthur	$2,375 65	
J. N. Allison	20 66	
G. W. Baird	36 39	
E. H. Brooke	65	
A. E. Bates	2 69	
G. E. Breckett	45 00	
S. Bachtell	29 28	
J. P. Baker	4 53	
J. A. Brodhead	20,000 00	
W. E. Creary	68 27	
A. B. Carey	61,451 33	
W. H. Comegys	349 72	
F. M. Coxe	132 52	
G. W. Candee	6 32	
J. P. Canby	18 02	
I. O. Dewey	47 89	
F. S. Dodge	75 15	
W. H. Eckels	108 61	
G. L. Febiger	49 49	
W. C. Forbush	15 00	
W. R. Gibson	1,009 04	
G. E. Glenn	359 81	
P. P. G. Hall	707 25	
W. H. Johnston	3 26	
J. B. Keefer	5 66	
D. R. Larned	93 12	
C. McClure	16 40	
W. M. Maynadier	189 70	
J. H. Nelson	222 07	
D. C. Poole	1 59	
G. F. Robinson	1 28	
J. R. Roche	628 23	
W. A. Rucker	82 39	
T. C. H. Smith	81	
C. J. Sprague	602 66	
T. H. Stanton	518 13	
R. Smith	53 01	
W. H. Smith	168 00	
C. C. Sniffin	5 93	
C. M. Terrell	163 89	
H. G. Thomas	28	
N. Vedder	799 09	
C. I. Wilson	362 21	
C. H. Whipple	30 01	
J. S. Witcher	29 01	
J. W. Wham	18 28	
		90,908 28
		71,301 40
Pay of the Army, 1882:		
To J. N. Allison		11 97
Martin Allen		35 72
T. B. Briggs		34 83
A. E. Bates		7,058 14
O. B. Boyd		38 21
G. L. Browning		53 15
L. A. Chamberlain		18 51
A. B. Carey		18,500 00
K. Clarke		80 85
H. H. Crews		46 44
I. O. Dewey		58 14
P. H. Ellis		41 85
Fannie H. Ferris		28 00
W. C. Forbush		15 00
P. P. G. Hall		58 14
K. D. Hewitt		66 12
W. H. Johnston		45 26
E. D. Judd		60 82
G. M. Lewis		2 02
A. Murry		303 75
W. M. Maynadier		58 14
Carried forward		26,615 06

1883–'84.

MILITARY ESTABLISHMENT.

Pay of the Army, 1882—Continued.		
Brought forward		$26,615 06
To J. C. Mallery		14 06
W. R. Price		32 94
J. R. Roche		15,000 00
R. Smith		69 76
F. Schwatka		7 42
W. N. Sage		41 85
C. B. Schofield		62 06
T. F. Tobey		41 85
N. Vedder		775 84
A. O. Vincent		227 29
J. T. Wirkman		52 09
S. L. Wright		13 56
War Department		3 08
		42,956 85
Deduct repayments:		
By D. N. Bash	$1 02	
G. W. Baird	917 66	
J. P. Baker	18 33	
E. H. Brooke	21	
A. E. Bates	982 18	
J. E. Blaine	41 13	
W. H. Comegys	234 64	
W. E. Creary	11 19	
F. M. Coxe	21 63	
J. P. Canby	1 67	
G. W. Candee	523 01	
H. Clayton	104 38	
I. O. Dewey	34	
W. H. Eckels	43	
G. L. Febiger	59 58	
W. R. Gibson	2,000 00	
G. E. Glenn	425 34	
P. P. G. Hall	2,557 77	
E. Hunter	8 93	
D. R. Larned	515 51	
W. M. Maynadier	11 98	
D. McClure	2,827 20	
C. McClure	50	
J. C. Muhlenberg	4 66	
J. P. Parker	1 07	
W. A. Rucker	506 69	
G. F. Robinson	40 80	
W. H. Smith	49 01	
T. C. H. Smith	3 90	
G. R. Smith	103 43	
R. Smith	1,000 00	
C. J. Sprague	2,878 63	
T. H. Stanton	1,012 93	
Alex. Sharp	1,042 95	
C. C. Sniffin	3,498 38	
W. F. Tucker	3,020 07	
C. M. Terrell	2,305 83	
J. W. Wham	1 47	
C. I. Wilson	6 25	
C. H. Whipple	20 00	
J. S. Witcher	2,192 81	
J. P. Willard	4 00	
		28,957 51
		13,999 34
Pay of the Army, 1883:		
To R. G. Armstrong		27 45
G. M. Bascom		22 20
A. B. Carey		7,000 00
J. H. Collins		100 00
J. H. Coale		156 00
W. Clifford		42 00
R. J. Godfrey		15 00
H. O. S. Heistand		2 75
J. C. G. Happersett		2 20
F. Lloyd		165 55
M. F. Merritt		125 93
Navy Department		8 44
D. G. Risley		87 75
W. A. Rucker		28,000 00
Soldiers' Home P. F		8 00
C. B. Schofield		189 17
L. E. Sebree		13 80
Treasurer United States		21 37
Carried forward		35,987 61

Pay of the Army, 1883—Continued.		
Brought forward		$35,987 61
To A. O. Vincent		39 37
War Department		3,178 43
		39,205 41
Deduct from repayments:		
By W. Arthur	$26,650 00	
D. N. Bash	4,947 00	
J. P. Baker	1,029 64	
A. E. Bates	1,603 34	
G. W. Baird	370 39	
J. E. Blaine	575 07	
J. P. Canby	432 29	
W. H. Comegys	911 66	
G. W. Candee	391 61	
F. M. Coxe	797 25	
W. E. Creary	1,311 28	
H. Clayton	2,118 52	
H. H. Crews	61 58	
F. S. Dodge	210 00	
I. O. Dewey	1,491 04	
W. H. Eckels	378 55	
G. L. Febiger	14,878 30	
W. R. Gibson	3,939 37	
G. E. Glenn	507 95	
P. P. G. Hall	656 92	
P. L. Hogeboom	12 77	
E. M. Heyl	71 52	
W. H. Johnston	1,946 88	
J. B. Keefer	298 94	
D. R. Larned	558 19	
J. C. Muhlenberg	2,421 15	
C. McClure	912 31	
D. McClure	531 58	
W. M. Maynadier	5,570 41	
D. C. Poole	1,055 32	
J. P. Parker	6 77	
W. A. Rucker	1,255 88	
J. R. Roche	82 67	
G. F. Robinson	819 06	
T. H. Stanton	41,647 51	
W. H. Smith	1,950 25	
G. R. Smith	418 65	
T. C. H. Smith	117 67	
R. Smith	839 12	
W. Smith	466 60	
C. J. Sprague	1,181 90	
C. C. Sniffin	1,500 99	
Alex. Sharp	1,428 73	
H. G. Thomas	1,792 53	
A. S. Towar	1,064 70	
W. F. Tucker	3,478 99	
C. M. Terrell	58,441 88	
J. C. Traynor	16 86	
J. R. Wasson	604 10	
J. P. Willard	2,800 83	
J. W. Wham	1,092 06	
C. I. Wilson	914 04	
J. S. Witcher	1,145 10	
C. H. Whipple	2,291 01	
		201,998 73
Excess of repayments		162.793 32
Pay of the Army, 1884:		
To W. Arthur, major		1,298,000 00
A. E. Bates, major		840,000 00
G. W. Candee, major		273,000 00
A. B. Carey, major		27,000 00
G. L. Febiger, major		693,000 00
W. R. Gibson, major		2,060,000 00
G. E. Glenn, major		250,000 00
P. P. G. Hall, major		501,000 00
V. G. Humbert, lieutenant		130 00
D. McClure, colonel		1,573,000 00
J. Morris		35 40
P. McCann		2 60
J. H. H. Peshine, lieutenant		9 56
W. A. Rucker, colonel		1,771,000 00
H. B. Reese, major		47,000 00
T. H. Stanton, major		1,095,000 00
Carried forward		10,428,177 56

Pay of the Army, 1884—Continued.

	Brought forward		$10,428,177 56
To	R. Smith, colonel		629,000 00
	W. H. Smith, major		10,000 00
	C. M. Terrell, major		902,000 00
	War Department		3,573 15
			11,972,750 71
	Deduct repayments:		
By	W. Arthur	$4,371 53	
	D. N. Bash	3,025 29	
	A. E. Bates	3,653 16	
	G. W. Baird	2,585 78	
	J. E. Blaine	3,787 88	
	J. P. Baker	6,644 44	
	John Bradley	1 00	
	H. Clayton	3,719 52	
	J. P. Canby	2,232 72	
	W. E. Creary	1,392 97	
	W. H. Comegys	4,343 24	
	G. W. Candee	393 95	
	F. M. Coxe	738 90	
	Company fund	7 00	
	J. P. Crosly	587 30	
	A. B. Carey	31	
	F. S. Dodge	3,416 73	
	I. O. Dewey	1,858 39	
	W. H. Eckels	2,380 00	
	W. R. Gibson	5,233 01	
	G. E. Glenn	1,958 39	
	P. P. G. Hall	1,233 56	
	W. H. Johnston	968 71	
	J. B. Keefer	722 25	
	D. R. Larned	2,578 41	
	J. C. Muhlenberg	4,814 72	
	D. McClure	258 80	
	C. McClure	1,819 77	
	W. M. Maynadier	5,661 72	
	P. Moffatt	156 50	
	W. A. Packer	229 25	
	D. C. Poole	2,743 08	
	G. F. Robinson	2,980 39	
	W. A. Rucker	960 75	
	J. R. Roche	700 63	
	T. H. Stanton	3,997 44	
	W. H. Smith	3,090 08	
	R. Smith	1,972 11	
	W. Smith	1,978 12	
	G. R. Smith	1,497 72	
	A. Smith	2,352 45	
	C. C. Sniffen	4,311 60	
	C. J. Sprague	3,049 56	
	W. F. Tucker	6,760 61	
	C. M. Terrell	394 44	
	H. G. Thomas	2,862 60	
	A. S. Towar	3,728 30	
	J. P. Willard	2,220 30	
	J. S. Witcher	1,002 52	
	C. I. Wilson	2,070 49	
	J. W. Wham	1,989 92	
	C. H. Whipple	6,076 67	
			127,514 98
			11,845,235 73

Pay of volunteers Mexican war, 1871 and prior years, (transfer account):

By	S. H. Renfro	$1 60

Mileage of the Army, 1882:

To	A. B. Carey, major		500 00
	H. W. Lawton, captain		58 72
	J. R. Roche, major		182 16
			740 88
	Deduct from repayments:		
By	A. E. Bates	$0 96	
	W. R. Gibson	12 96	
	C. McClure	90 88	
	J. R. Roche	2,148 59	
	C. M. Terrell	11 30	
	Carried forward	2,264 69	740 88

Mileage of the Army, 1882—Continued.

	Deduct from repayments:		
	Brought forward	$2,264 69	$740 88
By	W. F. Tucker	48	
	J. S. Witcher	2 32	
			2,267 49
	Excess of repayments		1,526 61

General expenses of the Army, 1882:

To	A. B. Carey		83 57
	J. R. Roche		100 00
			183 57
	Deduct from repayments:		
By	G. W. Baird	$803 19	
	D. N. Bash	25	
	W. E. Creary	2 00	
	H. Clayton	29 79	
	F. M. Coxe	8 42	
	W. H. Comegys	761 04	
	W. R. Gibson	761 41	
	G. E. Glenn	86 26	
	P. P. G. Hall	30 99	
	C. McClure	2 74	
	D. McClure	16 00	
	J. R. Roche	2,138 73	
	W. A. Rucker	1,099 22	
	C. J. Sprague	190 79	
	T. H. Stanton	1,799 90	
	A. Sharp	384 42	
	R. Smith	369 80	
	W. H. Smith	2 73	
	W. F. Tucker	35 28	
	C. M. Terrell	130 26	
	N. Vedder	48 20	
	J. S. Witcher	18 80	
			8,720 23
	Excess of repayments		8,536 66

Collecting, drilling, and organizing volunteers, 1871 and prior years (transfer account):

To	J. M. McCall		30 21
	Deduct from repayments:		
By	F. Myers	$4 57	
	J. T. Sprague	56 25	
			60 82
	Excess of repayments		30 61

Collecting, drilling, and organizing volunteers, 1871 and prior years:

By	R. C. Duryea	$19 90
	W. H. Johnston	79 89
		99 79

Secret-service fund, 1871 and prior years (transfer account):

To	J. G. Chandler	4,955 78

Draft and substitute fund, 1871 and prior years:

By	W. H. Johnston	$24 93

Pay of the Military Academy, 1883:

By	W. Arthur	$11,412 70

Pay of the Military Academy, 1884:

To	W. Arthur, major		66,000 00
	D. McClure, colonel		141,000 00
			207,000 00
	Deduct repayments:		
By	W. C. Lilly	$58 07	
	J. Smith	23 16	
			81 23
			206,918 77

Collection and payment of bounty, prize-money, &c., colored soldiers, 1881 and 1882:
By A. B. Carey..... $21 42

Collection and payment of bounty, prize-money, &c., colored soldiers, 1883:
By A. B. Carey..... $1,010 52

Collection and payment of bounty, prize money, &c., colored soldiers, 1884:
To A. B. Carey, major..... $1,500 00

Bounty to Fifteenth and Sixteenth Missouri Cavalry Volunteers:
To A. B. Carey, major..... 26,000 00

Bounty to volunteers and regulars on enlistment, 1871 and prior years (transfer account):
By J. L. Styron..... $25 00

Bounty to volunteers and regulars on enlistment, 1871 and prior years:
By H. De B. Clay..... $18 61
W. H. Johnston 33 33
51 94

Bounty to volunteers, their widows and legal heirs, 1871 and prior years (transfer account):
By F. P. Bouteiller..... $25 00
J. M. Starr 25 00
50 00

Bounty to volunteers, their widows and legal heirs, 1871 and prior years:
To A. B. Carey, major..... 124,259 93
J. R. Roche, major..... 2,000 00
G. R. Smith, major..... 23,740 07
150,000 00

Deduct repayments:
By appropriation account $164 50
A. B. Carey..... 2,529 87
2,694 37
147,305 63

Transportation of officers and their baggage, 1871 and prior years:
By J. S. Brisbin $13 86
J. B. Johnson 74 48
J. D. McBride..... 100 00
C. McKibben..... 2 09
L. Merrill..... 2 28
D. G. Swain 1 43
194 14

Transportation of officers and their baggage, 1871 and prior years (transfer account):
By E. R. Ames..... $7 94
G. L. Browning..... 28 43
C. J. Wilson..... 114 08
150 45

Pay of two and three years' volunteers, 1871 and prior years (transfer account):
To J. T. Boyd..... 329 79
F. P. Bouteiller 201 51
Carried forward..... 531 30

Pay of two and three years' volunteers, 1871 and prior years (transfer account)—Continued.
Brought forward..... $531 30
To J. Gillespie..... 3 00
J. N. Hill..... 15 00
J. W. McAbee 13 40
S. H. Price 27 98
P. Phelan 6 00
L. L. Potter 14 34
S. H. Renfro..... 1 60
H. C. Rhodes 264 32
J. I. Salter 18 73
J. L. Styron 26 50
T. F. Tabers..... 37 74
959 91

Deduct repayments:
By O. M. Poe..... $134 69
N. Vedder..... 246 75
381 44
578 47

Pay of two and three years' volunteers, 1871 and prior years:
To W. Anman..... 7 76
W. H. Bendick..... 30 75
A. B. Carey, major 99,000 00
J. C. Chance 35 63
J. Gillespie 27 00
Jno. Hawk..... 400 00
J. N. Hill..... 147 66
E. D. Judd 2 89
J. A. Lawyer..... 828 88
J. W. McAbee..... 189 88
L. Moore..... 11 80
M. J. Preston 100 00
P. Phelan 284 97
L. L. Potter 271 74
J. R. Roche, major..... 13,000 00
J. A. Robinson 56 66
I. M. Stave..... 52 58
G. R. Smith, major..... 6,217 40
Jas. Sigler..... 580 00
C. B. Schofield..... 25 85
J. I. Salter..... 630 04
J. L. Styron 647 86
S. L. Wright..... 19 21
J. E. White..... 530 00
123,098 56

Deduct repayments:
By appropriation account $637 26
E. R. Brink..... 966 37
A. B. Carey 826 68
G. W. Candee 31 37
J. Carlowitz..... 90 00
J. O. Coleman 47 60
J. F. Files..... 449 89
H. A. Goodale 206 75
W. W. Hibbard 15 59
J. Hobensack..... 164 00
G. H. Kearn 74 38
J. M. Kerr..... 139 68
G. H. Ladley 28 48
Thos. Lees 205 25
F. Lowry..... 128 67
J. W. Martin 23 26
W. H. Pratt 117 90
B. B. Pease 100 00
A. Roecker..... 309 67
J. W. Smith 600 00
G. R. Stone..... 66 57
C. M. Terrell 404 47
A. Wilkinson 30 89
Hugh Weston..... 178 52
D. H. Williams 152 24
5,995 49
117,103 07

Subsistence of the Army, 1881 and prior years:		
By F. Braisted	$25 00	
W. H. C. Bowen	30 00	
H. G. Cavanaugh	1 10	
J. A. Ekin	1 35	
L. Heist	50	
M. B. Ludington	9 38	
J. W. Palmer	3 93	
A. Terry	1 40	
W. B. Tooker	3 11	
W. P. Vose	25 43	
	101 20	
Subsistence of the Army, 1881 and prior years (transfer account):		
To R. B. Treat		18 80
Deduct from repayments:		
By E. R. Ames	$74 84	
J. T. Boyd	329 79	
F. P. Bouteiller	176 51	
G. W. Chilson	31 06	
G. W. Cradelbaugh	248 48	
Jno. Gillespie	3 00	
G. N. Hill	15 00	
C. H. Ingram	215 60	
A. Murry	30 99	
S. H. Price	2 46	
L. L. Potter	14 34	
H. C. Rhodes	264 32	
J. I. Salter	18 73	
Union Pacific R. R.	66 40	
War Department	40 98	
		1,532 50
Excess of repayments		1,513 70
Subsistence of the Army, 1882 (transfer account):		
By Union Pacific R. R.	$18 48	
Subsistence of the Army, 1882:		
To C. B. Hall		2 20
R. H. Jordan		5 02
W. H. Nash		4,500 00
		4,507 22
Deduct repayments:		
By Chicago, Milwaukee and Saint Paul R. R.	$15 04	
W. Davis	10 95	
Denver and Rio Grande R. R.	1 11	
W. Fletcher	10 50	
C. H. Greene	5 25	
G. S. Hoyt	2 22	
J. T. Kirkman	3 78	
Missouri Pacific R. R	54 30	
C. McKibben	8 40	
P. H. Ray	1,060 79	
B. K. Roberts	10 92	
J. M. Ross	25	
F. D. Sharp	1 60	
C. M. Schaffer	1 37	
J. M. Stotsenberg	3 40	
A. E. Wood	18	
J. McA. Webster	12 53	
War Department	24 95	
		1,227 54
		3,279 68
Subsistence of the Army, 1883 (transfer account):		
By Union Pacific R. R.	$7 85	
Subsistence of the Army, 1883:		
To O. B. Boyd		4 00
Public Printer		1,005 28
W. H. Pender		6 75
War Department		44 46
Carried forward		1,060 49

Subsistence of the Army, 1883—Continued.		
Brought forward		$1,060 49
Deduct from repayments:		
By L. L. Ames	$7 50	
Atchison, Topeka and Santa Fé R. R.	62 30	
E. B. Atwood	4 70	
Atlantic and Pacific R. R	34 85	
W. W. Burns	9,330 52	
J. W. Barriger	6 53	
G. W. Bascom	8 67	
C. A. Booth	16 23	
S. T. Cushing	3 00	
W. Clifford	12 60	
Chicago and Northwestern R. R	64 99	
L. E. Campbell	2 42	
S. B. Coulson	4 44	
G. A. Drew	4 47	
Denver and Rio Grande R. R	66 71	
W. A. Elderkin	138 50	
C. P. Eagan	36	
F. T. Evans	40 65	
J. V. Furey	9 55	
N. Fisher	20 57	
E. B. Grimes	26 13	
R. N. Getty	2 64	
D. S. Gordon	2 20	
C. Grover	20 90	
G. S. Hoyt	1 10	
F. H. Hardie	77 21	
H. O. S. Heistand	2 75	
M. J. Jenkins	17 52	
A. S. Kimball	8 80	
Lake Shore	34	
Missouri Pacific R. R	192 20	
J. M. Marshall	1 71	
S. Pratt	159 11	
S. C. Robertson	20 00	
P. H. Ray	689 80	
C. Smith	6 40	
C. M. Schaeffer	31 01	
C. G. Starr	26 46	
C. A. Woodruff	12,824 03	
D. D. Wheeler	145 38	
W. M. Wallace	9 00	
J. McA. Webster	30 80	
War Department	653 80	
		24,788 85
Excess of repayments		23,728 36
Subsistence of the Army, 1884:		
To I. Arnold, major		1,470 00
Geo. Bell, major		143,000 00
W. H. Bell, captain		24,700 00
J. W. Barriger, major		350,000 00
W. W. Burns, colonel		30,000 00
C. A. Booth, captain		17,550 00
A. Beckwith, colonel		80,000 00
H. F. Clarke, colonel		111,000 00
W. A. Elderkin, captain		43,000 00
C. P. Eagan, captain		50,000 00
J. P. Hawkins, major		50,000 00
M. R. Morgan, major		40,000 00
A. S. M. Morgan, captain		2,300 00
O. E. Michaelis, captain		965 00
W. H. Nash, captain		10,500 00
C. B. Penrose, captain		55,000 00
F. H. Phipps, major		410 00
M. P. Small, major		232,000 00
T. C. Sullivan, major		120,000 00
C. A. Woodruff, captain		2,000 00
F. F. Whitehead, captain		20,000 00
Thos. Wilson, major		10,000 00
J. F. Weston, captain		90,000 00
W. Willard, captain		1,500 00
Carried forward		1,485,395 00

Subsistence of the Army, 1884—Continued.		
Brought forward		$1,485,395 00
Deduct repayments:		
By J. D. Bingham	$11 34	
Wm. Baird	2 47	
M. Carter	9 35	
W. H. Forwood	33 42	
J. V. Furey	11 70	
C. Grover	35 74	
M. P. Hall	7,000 00	
H. C. Hodges	5 85	
H. H. Humphreys	7 22	
J. H. Lord	44 30	
J. M. Marshall	7 30	
W. H. Nash	135 00	
S. Pratt	409 50	
J. O. Skinner	-2 47	
G. C. Smith	25 16	
G. K. Sanderson	73 71	
E. Sollock	3 36	
Thos. Wilson	30,000 00	
J. McA. Webster	16 50	
J. D. Wilkins	8 80	
War Department	6,254 90	
		44,098 09
		1,441,296 91
Regular supplies of the Quartermaster's Department, 1881 and prior years:		
By E. B. Atwood	$0 75	
J. M. Baldwin	14 25	
W. C. Bartlett	6 00	
S. W. Groesbeck	6 88	
J. F. Guilfoyle	1 50	
W. Howe	81 63	
W. B. Hughes	43	
J. S. Martin	36 65	
T. W. Morrison	12	
C. H. McNally	66 10	
C. McKibben	90	
L. A. Mantele	3 37	
P. Piner	2 66	
C. Porter	39 29	
J. H. Pardee	3 17	
G. B. Rodney	24 30	
H. J. Reilly	55 00	
B. K. Roberts	2 08	
W. G. Rankin	102 03	
N. D. A. Sawyer	4,336 43	
C. A. Steadman	12 00	
W. Stanton	23	
H. L. Scott	74 44	
R. Saxton	7 36	
G. Valois	1 00	
G. N. Whistler	05	
W. Wilkinson	549 69	
W. Willard	2 55	
W. W. Wotherspoon	74	
	5,431 60	
Regular supplies of the Quartermaster's Department, 1881 (transfer account):		
To B. C. Card, major		9 00
F. Myers, major		30 69
		39 69
Deduct from repayments:		
By E. R. Ames	$2 45	
L. A. Chamberlain	507 07	
J. G. Chandler	4,955 78	
C. N. W. Cunningham	5 34	
E. B. Grimes	100 00	
J. A. Irwin	10 50	
A. Murry	174 92	
J. M. McCall	30 21	
J. W. McAbee	13 40	
E. McSweeny	6 00	
Carried forward	5,805 67	39 69

Regular supplies of the Quartermaster's Department, 1881 (transfer account)—Continued.		
Deduct from repayments:		
Brought forward	$5,805 67	$39 69
By S. H. Price	25 52	
J. M. Starr	18 10	
R. B. Treat	18 80	
		5,868 09
Excess of repayments		5,828 40
Regular supplies of the Quartermaster's Department, 1882 (transfer account):		
By B. C. Card	$9 00	
Regular supplies of the Quartermaster's Department, 1882:		
To J. Ashmead		1 75
R. Beswick		6 00
W. Baldwin		15 00
E. Baldwin		8 50
D. S. K. Binck		3 25
J. A. Chenowith		10 00
J. E. Cardwell		3 00
P. Dunn		59 58
Dunbar Brothers		1 12
H. Elliott		3 00
J. J. Eaton		3 00
Emerson & Beals		49 22
D. J. Ferree		7 25
L. Giessber		18 06
Zenas Howard		9 50
H. D. Harkness		75
H. R. Lambert		3 00
J. M. Manning		79 00
P. W. McAdow		120 65
J. Nostrum		38 59
W. G. Parker		120 75
J. S. W. Smith		3 00
Tripp & Underwood		40 50
Jno. Van Horn		4 50
		608 97
Deduct repayments:		
By R. N. Batchelder	$0 10	
C. Bird	1 50	
J. H. Belcher	52 88	
W C. Bartlett	96 08	
W. H. Carter	15 00	
G. A. Darling	56 28	
Denver and Rio Grande R. R.	22 56	
F. A. Edwards	60	
L. C. Forsyth	87 93	
J. V. Furey	69	
E. E. Gayle	1 50	
W. Howe	100 33	
J. S. Marsteller	04	
T. D. Maurice	3 28	
A. M. Patch	10 00	
B. H. Randolph	23	
J. G. Ramsey	4 65	
H. A. Reed	1 87	
F. D. Sharp	68	
Jno. Scott	10 74	
A. M. Wetherill	2 50	
N. Wolf	35 39	
War Department	26	
		505 09
		103 88
Regular supplies of the Quartermaster's Department, 1883:		
To R. N. Batchelder, colonel		40,000 00
N. R. Baker		17 50
M. Brothers		98 00
R. G. Cooper		17 50
J. A. Ekin, colonel		17,228 00
O. W. Goit		591 83
H. C. Hodges, colonel		10,200 00
Carried forward		68,152 83

Regular supplies of the Quartermaster's Department, 1883—Continued.

Brought forward		$68,152 83
To Jno. Hall		50 00
C. A. Haman		9 00
H. C. Hooker		3 00
W. H. Pender		2 70
Risley & Wolfort		321 00
G. E. Roberts		28 50
C. G. Sawtelle, colonel		1,000 00
S. M. Steckler		17 50
W. W. Seymour		200 00
J. Thomas		138 00
W. H. Wilkes		3 20
E. L. Welch		2,472 96
War Department		4,971 70
		77,370 39
Deduct repayments:		
By L. S. Ames	$21 12	
E. P. Andrus	3 48	
C. A. Allison	34 10	
Atlantic and Pacific R. R	3 17	
E. B. Atwood	43 72	
A. P. Blunt	14 25	
R. N. Batchelder	9,892 92	
J. H. Belcher	54 06	
R. P. Brown	104 91	
J. J. Brereton	164 39	
A. Barrett	9 18	
C. Bird	90 13	
T. H. Barry	82 28	
D. H. Brush	39 92	
C. A. Booth	183 45	
A. H. Budlong	71 73	
G. Barrett	219 23	
C. R. Barrett	25 95	
W. Badger	12 00	
J. D. Bingham	417 63	
W. F. Blauvelt	09	
W. J. Campbell	119 10	
S. R. Collady	32 85	
W. O. Cory	208 45	
J. Carland	233 30	
G. H. Cook	70 42	
C. D. Cowles	29 98	
L. E. Campbell	389 27	
D. H. Clark	51 91	
W. H. Carter	70 97	
E. Chenoweth	9 71	
G. A. Cornish	114 40	
S. E. Clarke	161 81	
T. H. Capron	79 13	
L. A. Chamberlain	1 00	
G. B. Dandy	410 78	
R. H. Day	8,449 37	
E. Davis	127 10	
G. B. Davis	51 40	
B. Davis	16	
J. J. Dana	31 11	
J. Drum	61 59	
Denver and Rio Grande R. R	61	
R. T. Earle	16 52	
T. J. Eckerson	46 50	
H. E. Ebstein	5 25	
C. A. Ernest	42 22	
F. A. Edwards	73 15	
L. C. Forsyth	25 50	
J. V. Furey	36 04	
T. F. Forbes	261 98	
E. L. Fletcher	9 90	
C. W. Foster	3 75	
M. F. Goodwin	28 89	
E. B. Grimes	99 90	
Jas. Gilliss	267 55	
W. L. Geary	9 95	
E. Griffin	93 24	
M. J. Grealish	33 18	
C. Gardner	66 51	
E. A. Goodwin	16 20	
Carried forward	23,328 36	77,370 39

Regular supplies of the Quartermaster's Department, 1883—Continued.

Deduct repayments:		
Brought forward	$23,328 36	$77,370 39
By J. O. Green	48 41	
W. M. Gerlach	90 96	
J. G. Galbraith	25 53	
C. H. Hoyt	575 72	
W. B. Homer	109 23	
T. B. Hunt	145 70	
G. A. Hull	170 28	
C. B. Hinton	31 67	
C. L. Hodges	76 53	
J. A. Hutton	4 62	
W. Howe	38 33	
C. F. Humphrey	456 48	
J. T. Honeycutt	55 36	
E. E. Hardin	473 53	
H. C. Hodges	87 78	
W. H. Hamner	92 27	
W. B. Hughes	695 16	
L. R. Hare	109 79	
F. H. Hathaway	39 16	
R. H. Hoyt	260 91	
W. P. Hall	73 46	
O. S. Heistand	10 50	
C. Hay	73 12	
P. Hasson	9 54	
M. F. Harmon	22 85	
G. S. Hoyt	90 82	
J. W. Jacobs	86 69	
C. P. Johnson	94 66	
F. B. Jones	42 13	
E. C. Knower	17 05	
A. S. Kimball	19 50	
D. H. Kelson	65 25	
H. M. Kendall	124 81	
I. W. Lord	118 59	
J. H. Lord	35 64	
J. G. C. Lee	87 71	
W. Mott	231 70	
J. M. Marsball	53 39	
J. A. Maney	13 50	
W. H. Miller	30 77	
C. P. Miller	56 04	
J. Miller	6 00	
C. C. Morrison	13 05	
G. B. Mitcham	33 64	
A. S. M. Morgan	5 24	
F. H. Mills	83 21	
A. S. Myer	3 63	
A. E. Miltimore	35 08	
W. P. Martin	19 05	
O. E. Michaelis	3 00	
T. S. Mumford	408 41	
G. H. Morgan	17 73	
A. J. McGonnigle	26 48	
Jno. Newton	25 29	
H. B. Osgood	85 13	
J. A. Olmstead	31 55	
J. J. O'Brien	57 99	
J. W. Powell	100 86	
C. G. Penny	7 20	
J. H. H. Peshine	25 74	
Jno. Pitman	77 35	
G. T. T. Patterson	92 45	
D. C. Pearson	122 03	
F. H. Phipps	12 03	
R. D. Potts	17 17	
A. M. Patch	247 68	
F. E. Phelps	2 28	
W. L. Pitcher	89 78	
N. P. Phister	60 10	
J. M. Porter	222 16	
W. Quinton	215 74	
A. J. Russell	120 14	
A. H. Russell	37 71	
W. H. Rexford	66 16	
H. J. Reilly	242 60	
Jas. Regan	97 23	
H. L. Ripley	53 67	
B. H. Randolph	3 00	
Carried forward	31,041 06	77,370 39

Regular supplies of the Quartermaster's Department, 1883—Continued.

Deduct repayments:		
Brought forward	$31,041 06	$77,370 39
By J. M. Ross	171 90	
A. G. Robinson	1 35	
F. M. Roe	66 45	
C. A. Reynolds	79 58	
G. Ruhlen	11 69	
S. Smith	304 05	
J. F. Simpson	256 45	
I. O. Shelby	136 24	
J. A. Sladen	42 13	
D. F. Stiles	42 75	
R. R. Stevens	26 07	
E. J. Strang	89 85	
J. W. Sculley	246 13	
C. G. Starr	6 65	
G. H. Sands	33 60	
J. A. Swift	36 33	
J. Simpson	11 22	
C. Smith	21 83	
A. C. Sharpe	15 72	
G. C. Smith	113 19	
G. L. Scott	11 57	
C. G. Sawtelle	12 82	
R. Saxton	43 15	
W. R. Thurston	6 00	
Fred. Thies	38 94	
C. H. Tompkins	75 00	
Frank Thorp	111 88	
R. E. Thompson	23 03	
C. P. Terrett	25 50	
A. H. M. Taylor	9 90	
J. T. Thompson	1 82	
A. H. M. Taylor	3 00	
S. C. Vedder	99 74	
W. W. Wotherspoon	164 38	
J. V. White	75 25	
G. H. Weeks	88 64	
J. T. Webster	23 86	
W. M. Williams	88 09	
D. D. Wheeler	394 62	
R. H. Wilson	24 89	
C. W. Williams	68 68	
J. A. Webster	18 61	
G. N. Whistler	81 87	
J. L. Wilson	24 33	
P. G. Wood	275 93	
J. McA. Webster	08	
War Department	1,052 79	
D. J. Young	169 26	
		35,767 87
		41,602 52

Regular supplies of the Quartermaster's Department 1883 (transfer account):

By Union Pacific R. R.	$3 36	

Regular supplies of the Quartermaster's Department, 1884:

To J. C. Ayers, captain	1,277 27
E. B. Atwood, captain	500 00
R. N. Batchelder, colonel	52,294 28
J. D. Bingham, colonel	276,978 89
J. H. Belcher, major	15 00
C. A. Booth, captain	9,495 80
Frank Baker, lieutenant	718 42
A. P. Blunt, captain	1,328 34
J. L. Clark, lieutenant	1 50
G. H. Crook, major	20 40
G. B. Dandy, major	287,697 38
J. J. Dana, colonel	18,718 72
Denver and Rio Grande R. R	1,064 82
J. A. Ekin, colonel	1,113 79
J. P. Farley, major	190 00
C. W. Foster, major	631 18
D. W. Flagler, colonel	1,075 90
J. Gilliss, major	232,189 22
M. J. Grealish, captain	1,708 04
Carried forward	887,018 95

Regular supplies of the Quartermaster's Department, 1884—Continued.

Brought forward		$887,018 95
To W. B. Gordon, lieutenant		343 58
C. H. Hoyt, captain		27,000 00
H. C. Hodges, colonel		30,695 68
W. B. Hughes, major		181 66
C. F. Humphrey, captain		3,600 00
J. H. Jacobs, captain		434 84
A. S. Kimball, captain		170,750 00
J. G. C. Lee, major		427,023 93
M. I. Ludington, colonel		9,646 87
J. L. Lusk, lieutenant		86 53
M. W. Lyon, lieutenant		1,257 36
J. M. Moore, colonel		586,639 59
A. J. McGonnigle, major		322,304 40
O. B. Mitcham, lieutenant		1,249 00
A. E. Miltimore, major		11,384 12
A. S. M. Morgan, captain		941 80
C. C. Morrison, lieutenant		1,359 47
O. E. Michaelis, captain		120 00
H. B. Osgood, lieutenant		60 51
F. H. Phipps, major		775 00
A. J. Perry, colonel		76,832 11
G. E. Pond, captain		1,500 00
C. A. Reynolds, major		4,081 94
W. H. Rexford, captain		1,721 38
C. G. Sawtelle, colonel		90,755 92
E. J. Strang, major		558 01
R. Saxton, colonel		56,020 63
J. W. Scully, major		488 87
C. H. Tompkins, colonel		75,243 69
G. H. Weeks, major		98,446 47
War Department		441 33
D. J. Young, captain		1,344 90
		2,890,308 54

Deduct repayments:

By E. B. Atwood	$580 59	
L. S. Ames	89 11	
J. C. Ayers	148 10	
A. A. Augur	194 35	
C. A. Alligood	284 70	
W. R. Abercrombie	29 15	
H. M. Andrews	195 37	
C. Bird	752 60	
W. Badger	25 50	
R. N. Batchelder	4,790 39	
R. P. Brown	224 47	
C. A. Booth	12 80	
D. H. Brush	229 23	
H. L. Bailey	5 16	
J. H. Belcher	202 38	
C. M. Bailey	161 00	
F. Baker	56 63	
E. B. Bolton	370 22	
C. R. Barnett	340 46	
G. Barrett	1,003 60	
A. P. Blunt	448 50	
J. J. Brereton	199 09	
A. H. Budlong	620 33	
T. H. Barry	408 12	
J. G. Ballance	392 91	
E. H. Brown	84 60	
D. H. Boughton	113 17	
E. H. Brooks	34 33	
W. F. Blauvelt	51 93	
W. J. Campbell	29 38	
L. E. Campbell	1,493 15	
S. R. Collady	15 15	
G. H. Cook	763 66	
Jno. Carland	2,046 33	
C. D. Cowles	229 49	
D. H. Clark	621 74	
G. A. Cornish	409 18	
G. R. Cecil	402 94	
J. Cotter	8 00	
E. H. Crowder	13 44	
L. C. Carpenter	120 24	
W. O. Cory	343 57	
W. H. Carter	174 56	
L. A. Chamberlain	313 82	
Carried forward	19,033 44	2,890,308 54

Regular supplies of the Quartermaster's Department, 1884—Continued.

Deduct repayments:			
Brought forward	$19,033 44	$2,890,308 54	
By J. L. Clem	495 66		
C. H. Cabaniss	303 54		
S. E. Clark	850 08		
E. S. Chapin	469 59		
T. H. Capron	604 09		
P. Campbell	303 63		
Thos. Connolly	20 64		
H. G. Cavenaugh	171 54		
J. Drum	160 06		
W. W. Dougherty	97 40		
E. Davis	95 91		
F. L. Dodge	149 64		
E. S. Dudley	180 50		
T. J. Eckerson	781 96		
F. H. Edmunds	761 51		
F. H. E. Ebstein	32 12		
F. A. Edwards	364 92		
R. T. Earle	134 56		
C. W. Foster	795 71		
J. V. Furey	198 37		
L. C. Forsyth	693 85		
T. F. Forbes	1,571 24		
D. H. Floyd	266 71		
J. P. Farley	81 78		
F. Fuger	1,348 84		
D. W. Flagler	206 95		
Jas. Gilliss	385 02		
E. B. Grimes	248 14		
E. A. Godwin	118 71		
J. O. Green	12 67		
M. J. Grealish	127 35		
C. Gardner	159 83		
W. Gerlach	392 80		
R. N. Getty	14 96		
W. L. Geary	227 85		
G. S. Grimes	40 75		
E. I. Grumby	116 90		
W. H. Gill	86 87		
J. G. Galbraith	124 14		
W. B. Gordon	305 18		
G. Hunter	17 68		
M. F. Harmon	27 24		
J. T. Honeycutt	152 81		
C. L. Hodges	1,265 27		
T. B. Hunt	291 65		
J. F. Huston	3,122 74		
E. E. Hardin	1,149 93		
H. C. Hodges	543 86		
W. B. Homer	641 62		
C. H. Hoyt	5,208 72		
C. F. Humphrey	1,425 04		
R. W. Hoyt	355 51		
R. Hanna	217 49		
F. H. Hathway	189 43		
W. Howe	471 29		
P. Hasson	283 48		
L. R. Hare	721 47		
W. B. Hughes	341 20		
G. A. Hull	24 10		
G. S. Hoyt	501 29		
H. O. S. Heistand	82 09		
F. H. Hardie	83 79		
H. W. Hovey	145 01		
W. H. Hamner	233 89		
W. P. Hall	172 06		
C. H. Ingalls	56 25		
F. B. Jones	393 72		
C. P. Johnson	84 87		
J. W. Jacobs	331 86		
A. B. Johnson	317 92		
M. F. Jamar	17 10		
A. S. Kimball	61 00		
D. H. Kelton	418 66		
W. V. Kennon	394 09		
H. M. Randall	287 83		
J. T. Kerr	479 73		
J. H. Lord	223 07		
J. L. Lusk	1,243 89		
Carried forward	54,514 06	2,890,308 54	

Regular supplies of the Quartermaster's Department, 1884—Continued.

Deduct repayments:			
Brought forward	$54,514 06	$2,890,308 54	
By M. W. Lyon	34 88		
E. Lynch	83 78		
C. P. Miller	284 55		
C. C. Morrison	61 12		
A. Moore	3 00		
J. M. Marshall	498 23		
O. B. Mitcham	68 73		
A. E. Miltimore	497 64		
F. H. Mills	792 38		
T. S. Mumford	1,194 49		
W. H. Miller	321 68		
J. B. McDonald	391 74		
C. A. H. McCauley	473 10		
A. L. Meyer	106 22		
A. J. McGonnigle	123 87		
M. C. Martin	252 14		
O. E. Michaelis	287 27		
M. M. Maxon	709 25		
A. H. Merrill	20 87		
A. S. M. Morgan	222 79		
A. Michler	54 01		
G. H. Morgan	11 77		
F. Marsh	168 75		
C. H. McNally	58 14		
W. Mott	182 50		
F. Michler	289 30		
J. A. Maney	4 90		
John Newton	179 45		
H. B. Osgood	191 12		
J. A. Olmstead	627 96		
J. J. O'Brien	24 43		
F. H. Phipps	90 28		
J. H. H. Peshine	387 35		
D. C. Pearson	490 97		
R. D. Potts	283 19		
C. G. Penny	1 12		
J. M. Porter	5 16		
A. M. Patch	331 03		
F. E. Pierce	7 44		
G. T. T. Patterson	517 96		
W. Quinton	541 75		
B. H. Randolph	8 40		
W. V. Richards	938 04		
A. G. Robinson	536 42		
W. H. Rexford	304 81		
A. J. Russell	232 79		
H. J. Reilly	2,406 79		
Jas. Reagan	975 90		
A. H. Russell	246 29		
J. G. Ramsey	495 26		
F. W. Roe	79 79		
B. K. Roberts	67 40		
H. D. Reed	90 58		
B. Reynolds	341 76		
W. F. Rice	668 57		
H. E. Robinson	1,090 03		
W. W. Robinson	846 26		
F. S. Rice	118 30		
J. W. Scully	551 13		
G. H. Sands	101 29		
G. L. Scott	5 55		
D. F. Stiles	408 19		
J. A. Sladen	606 54		
E. J. Strang	19 75		
S. Smith	1,009 20		
G. C. Smith	183 44		
J. Simpson	1,240 95		
C. Smith	92 13		
J. Stafford	275 04		
J. A. Swift	441 33		
R. R. Stevens	27 49		
A. C. Sharpe	154 43		
C. G. Starr	356 80		
J. W. Summerhayes	69 50		
R. Saxton	19 07		
S. E. Sparrow	307 00		
J. F. Simpson	18 56		
C. H. Tompkins	1,655 05		
F. Thorp	1,110 26		
Carried forward	83,490 46	2,890,308 54	

Regular supplies of the Quartermaster's Department, 1884—Continued.

Deduct repayments:			
Brought forward		$83,490 46	$2,890,308 54
By J. T. Thompson	207 85		
C. P. Terrett	45 72		
G. A. Thurston	395 60		
A. H. M. Taylor	59 53		
W. W. Tyler	61 50		
S. C. Vedder	1,256 71		
C. B. Vodges	89 18		
M. W. Williams	20 25		
J. V. White	133 97		
D. D. Wheeler	1,512 53		
I. T. Webster	41 21		
G. H. Weeks	662 25		
G. L. Wilson	17 48		
W. W. Wotherspoon	932 71		
C. A. Williams	126 60		
J. H. Waters	224 49		
G. N. Whistler	365 45		
R. H. Wilson	138 62		
C. W. Williams	332 14		
H. D. H. Waite	167 61		
W. Wittich	252 81		
J. McA. Webster	278 27		
J. L. Wilson	335 55		
P. G. Wood	190 51		
M. C. Wessells	493 78		
F. Wheeler	293 19		
B. C. Welch	162 18		
War Department	453 07		
D. J. Young	86 70		
A. T. Yeatman	133 64		
		92,961 56	
		2,797,346 98	

Incidental expenses of the Quartermaster's Department, 1881 and prior years (transfer account):

To F. Myers		23 56
J. R. Pierce		1 00
J. D. Wilkins		10 75
		35 31
Deduct from repayments:		
By E. R. Ames	$13 56	
J. A. Irwin	4 91	
J. Lawson	1 73	
F. Myers	63 68	
		83 88
Excess of repayments		48 57

Incidental expenses of the Quartermaster's Department, 1881 and prior years:

By C. C. Ayers	$2 62	
D. F. Croft	4 37	
J. H. Coale	41 60	
D. J. Craigie	6 50	
T. H. Capron	3 15	
D. Comman	49 00	
H. Cushman	2 00	
G. A. Darling	8 84	
G. B. Dandy	20 20	
T. J. Eckerson	2 80	
H. E. Ebstein	20	
J. F. Guilfoyle	5 70	
J. Humbert	6 20	
C. H. Hoyt	3 89	
H. C. Hodges	3 15	
W. B. Hughes	4 00	
S. R. Jones	5 46	
C. Keller	2 80	
T. C. Lebo	20	
T. W. Morrison	4 16	
F. H. Mills	5 29	
L. Merrill	6 15	
L. A. Matile	17 05	
Carried forward	205 33	

Incidental expenses of the Quartermaster's Department, 1881 and prior years—Continued.

Brought forward	$205 33	
By C. H. Noble	1 60	
H. G. Otis	1 80	
E. H. Price	23 85	
J. A. Payne	1 00	
W. P. Ritzins	2 00	
Geo. Ruhlen	13 75	
W. V. Richards	2 10	
W. I. Reed	100 81	
R. G. Shaw	1 00	
F. Schwatka	12 30	
J. H. Spencer	1 00	
J. W. Summerhayes	133 33	
R. Saxton	25	
J. C. Thompson	8 40	
C. W. Taylor	1 00	
E. D. Thomas	1 17	
C. A. Varnum	5 00	
H. Wygard	6 00	
C. L. Whiting	53	
G. N. Whistler	35 14	
War Department	30 37	
	587 73	

Incidental expenses of the Quartermaster's Department, 1882:

To R. N. Batchelder	$1,700 00
I. M. Bond	120 00
D. Comman	49 00
D. H. Clark	5 00
A. Diller	10 00
J. F. Ennis	18 55
W. H. Farrell	25 35
A. Glascocke	1 50
H. R. Hyde	5 00
A. G. Hill	50 00
A. Hoper	31 95
L. H. Horty	15 00
M. Hager	18 55
Jno. Jackson	30 00
F. M. Jeffries	25 00
Kansas Pacific R. R	219 86
A. Kelley	50
J. G. Mittlesdorf	2 10
J. Monaghan	8 00
R. F. Myers	18 55
Noland & Bronaugh	60 00
E. Reynolds	30 00
E. Rakowics	28 00
Treasury Department	50 75
Union Pacific R. R	2,143 43
Western Union Telegraph Company	3 99
	4,670 08

Deduct repayments:			
By J. S. Bishop	$16 20		
W. F. Blauvelt	3 33		
C. Bird	53 15		
J. M. Califf	5 60		
L. E. Campbell	8 00		
W. H. Carter	1 67		
C. D. Cowles	2 00		
M. W. Day	1 24		
L. C. Forsyth	51 92		
G. F. Foote	20		
E. B. Grimes	5 00		
W. P. Hall	6 40		
W. Hoffman	23 60		
G. S. Hoyt	50 05		
W. Howe	16 00		
H. F. Kendall	2 80		
A. S. Kimball	67 50		
E. Lloyd	20 65		
W. P. Martin	12		
D. C. Pearson	3 40		
H. H. Pershine	9 56		
W. L. Pitcher	12 40		
W. V. Richards	17 70		
Carried forward	378 49		0 08

Incidental expenses of the Quartermaster's Department, 1882—Continued.		
Deduct repayments:		
Brought forward	$378 49	$4,670 08
By Jno. Simpson	7 06	
G. L. Scott	6 20	
C. A. Steadman	1 75	
L. H. Strother	6 20	
C. H. Tompkins	625 55	
J. L. Wilson	10	
War Department	1,002 85	
		2,028 20
		2,641 88
Incidental expenses of the Quartermaster's Department, 1883 (transfer account):		
By Union Pacific R. R.	$1 50	
Incidental expenses of the Quartermaster's Department, 1883:		
To W. Allen		3 20
J. T. Athey		14 00
J. S. Bishop		27 00
G. Brown		10 85
W. Bookstore		7 20
P. Barr		7 20
C. F. Brown		6 00
M. Benham		6 00
W. Brothers		22 15
J. Banham		5 60
E. Berberick		15 40
A. Betzler		8 80
C. Bushbacker		8 80
J. M. Bond		105 00
J. Cavenaugh		17 85
J. Callahan		9 40
C. Conway		7 20
Indian Charley		12 50
J. S. Chisum		10 00
T. C. Cosgrove		25 00
I. D. Campbell		8 80
B. L. Duncan		30 00
J. A. Ekin		9,980 92
Peter Enler		49 83
A. J. Eastman		7 20
C. J. Eckert		6 00
Jno. Early		5 60
L. Edwards		5 60
J. F. Ennis		70
A. Faust		6 00
H. J. Franklin		30 00
W. H. Farrell		70
C. Gilkerson		4 80
F. J. Goodwin		15 40
J. Gallagher		8 80
J. Gorman		8 80
H. C. Hodges		21,100 00
L. Hoff		10 85
Jas. Humphries		92 00
Jos. Hannan		2 50
C. A. Hannan		10 50
G. T. Haucher		8 80
A. Hissee		8 80
C. Jackson		10 50
H. Jantzen		7 20
J. W. Jones		30 00
C. L. Kilburn		1 75
Kansas Pacific R. R.		140 47
S. Kappel		12 00
E. Kelly		6 00
T. Kivell		2 80
A. Kelley		6 50
L. H. Kortz		29 34
J. D. Kelley		8 80
C. Kuhlman		8 80
M. I. Ludington		1,801 15
J. J. Leonard		10 50
L. M. Ludlow		2 00
R. N. Lane		10 00
C. D. Lager		8 80
Carried forward		33,828 36

Incidental expenses of the Quartermaster's Department, 1883—Continued.		
Brought forward		$33,828 36
To G. D. Lunt		8 80
A. E. Miltimore		211 50
J. Murray		10 50
C. W. Mitchell		5 60
P. Murphy		3 20
F. Martin		7 20
J. B. McDermott		6 00
E. Marks		3 87
W. W. Morris		142 21
Maxwell Bros.		12 00
R. F. Myers		70
G. H. Norris		30 00
T. Nearing		5 60
A. Nicholls		21 00
B. Nichols		8 80
J. Plowden		17 85
E. Patras		5 60
J. S. Parker		7 20
W. H. Pender		3 15
F. Pair		8 80
A. E. Peterson		8 80
H. N. Price		8 80
H. Romeyn		6 35
E. Rakowics		19 95
F. F. Rooney		10 50
H. Reichmer		4 00
C. J. Reed		10 50
B. Randall		9 80
D. S. Rice		8 80
W. B. Richards		8 80
W. D. Russell		8 80
C. J. Schultz		10 50
G. F. Steuart		7 20
D. F. Sutton		6 00
J. Schambourg		7 20
E. Sommerville		9 80
W. W. Seymour		250 00
D. A. Spencer		8 80
P. B. Spencer		8 80
J. W. Thatcher		10 20
Western Union Telegraph Company		140 44
J. Wilson		7 20
F. Williams		6 00
B. A. Wait		6 00
War Department		2,195 40
		37,126 58
Deduct repayments:		
By L. S. Ames	$3 20	
E. B. Atwood	344 35	
J. H. Belcher	27 95	
T. H. Barry	6 00	
R. N. Batchelder	691 68	
J. J. Brereton	93 81	
A. Barrett	63 75	
J. D. Bingham	492 34	
W. F. Blauvelt	4 40	
W. J. Campbell	16 18	
F. De L. Carrington	220 60	
W. W. Carter	6 58	
C. D. Cowles	5 40	
T. N. Capron	80	
J. M. Califf	1 00	
G. B. Davis	15 84	
G. B. Dandy	100 93	
C. A. Ernest	66 19	
James Gilliss	19 56	
W. Gerlach	12	
E. E. Hardin	14	
L. R. Hare	3 92	
H. C. Hodges	10 72	
C. H. Hoyt	20 90	
F. H. Hathaway	10 85	
W. B. Hughes	441 92	
J. W. Jacobs	11 20	
H. M. Kendall	20 80	
J. G. C. Lee	1 58	
M. I. Ludington	4 00	
Carried forward	2,706 71	37,126 58

Incidental expenses of the Quartermaster's Department, 1883—Continued.

Deduct repayments:			
Brought forward.	$2,706 71		$37,126 58
By J. M. Marshall	4 08		
John Newton	115 01		
J. A. Olmstead	12 95		
D. C. Pearson	76 80		
C. A. Reynolds	119 60		
J. W. Scully	3 73		
C. G. Sawtelle	330 20		
R. Saxton	20 74		
A. H. M. Taylor	25		
C. H. Tompkins	1,054 63		
C. P. Terrell	1 80		
S. C. Vedder	25		
J. L. Wilson	1 00		
C. W. Williams	1 05		
G. H. Weeks	30 65		
D. D. Wheeler	213 63		
R. H. Wilson	36 80		
W. W. Wotherspoon	60		
War Department	1,045 30		
			5,775 78
			31,350 80

Incidental expenses of the Quartermaster's Department, 1884:

To J. C. Ayers, captain		200 00
R. N. Batchelder, colonel		34,860 32
J. D. Bingham, colonel		44,988 45
J. H. Belcher, major		1,161 12
C. A. Booth, lieutenant		3,497 55
Frank Baker, lieutenant		53 55
A. P. Blunt, captain		3 25
J. L. Clark		60 00
G. H. Cook, captain		2,287 49
J. J. Dana, colonel		6,569 16
G. B. Dandy, major		63,259 77
J. A. Ekin, colonel		3,908 76
C. W. Foster, captain		3 75
T. W. Fields		60 00
J. P. Farley, major		75 00
M. J. Grealish, captain		400 00
James Gilliss, captain		53,020 35
H. C. Hodges, colonel		28,136 91
C. H. Hoyt, captain		8,781 05
E. M. Hayes, captain		4 96
J. W. Jacobs, lieutenant		9 50
A. S. Kimball, captain		34,316 14
J. G. C. Lee, colonel		48,026 62
M. I. Ludington, colonel		19,394 69
J. L. Lusk, lieutenant		640 00
Mary Loftus		36 67
F. P. M. Lennam		7 50
M. W. Lyon, lieutenant		64 05
J. M. Moore, colonel		74,660 14
O. B. Mitcham, lieutenant		180 00
A. E. Miltimore, captain		7,770 98
C. C. Morrison, lieutenant		107 50
O. E. Michaelis, captain		289 20
A. J. McGonnigle, colonel		26,573 31
A. J. Perry, colonel		38,726 75
G. E. Pond, lieutenant		722 00
F. H. Phipps, captain		40 00
C. A. Reynolds, major		2,738 17
A. G. Robinson, major		416 50
A. H. Russell, lieutenant		56 00
C. G. Sawtelle, colonel		25,276 57
E. J. Strang, captain		20 00
R. Saxton, colonel		29,361 60
P. Salenting		26 60
J. W. Scully, captain		10 00
C. H. Tompkins, colonel		50,540 06
G. H. Weeks, major		29,703 74
War Department		9,072 28
D. J. Young		60 00
		650,178 01
Deduct repayments:		
By E. B. Bolton	$4 60	
John Carland	137 40	
Carried forward..	142 00	650,178 01

Incidental expenses of the Quartermaster's Department, 1884—Continued.

Deduct repayments:		
Brought forward.	$142 00	$650,178 01
By F. F. Forbes	96	
C. W. Foster	100 00	
F. H. Hathaway	40	
R. W. Hoyt	2 93	
J. A. Maney	50	
J. B. McDonald	8 00	
War Department	69 78	
		324 57
		649,853 44

Barracks and quarters, 1881:

By H. L. Bailey	$1 40
R. N. Batchelder	2 64
J. W. Bean	12 00
D. Corman	13 86
W. W. Dougherty	53
W. E. Edgerly	1 95
S. W. Fountain	3 29
J. F. Guilfoyle	1 75
G. S. Hoyt	50
J. A. Irwin	447 00
I. MacNutt	5
T. D. Maurice	2 24
H. P. Ritzins	298 13
G. R. Smith	3 33
C. A. Stedman	3 23
J. H. Spencer	3 78
G. K. Spencer	1 50
E. D. Thomas	1 15
D. D. Wheeler	2 00
H. S. Weeks	4 33
J. K. Warring	39 88
C. W. Williams	49
G. N. Whistler	2 45
War Department	10 80
	858 28

Barracks and quarters, 1881 and prior years (transfer account):

To J. W. Scully		39
B. C. Card		21 00
L. C. Forsyth		5,171 34
		5,192 73
Deduct repayments:		
By C. N. W. Cunningham	$7 50	
L. C. Forsyth	5,171 34	
J. A. Irwin	59	
J. R. Pierce	1 00	
		5,180 43
		12 30

Barracks and quarters, 1882 (transfer account):

By B. C. Card	$21 00

Barracks and quarters, 1882;

To Rice, Bone & Co	10 00
H. P. Ritzins	298 13
	308 13
Deduct from repayments:	
By E. T. Brown	$0 97
C. D. Cowles	1 33
F. A. Edwards	1 40
E. B. Gibbs	23
C. F. Humphrey	57 23
F. F. Kendall	6 63
J. S. Marsteller	2 00
J. M. Moore	486 84
A. M. Patch	1 16
C. L. Rodgers	2 00
G. C. Smith	1 20
N. Wolf	3 60
Carried forward..	564 59 308 13

Barracks and quarters, 1882—Continued.

Deduct repayments:		
Brought forward	$564 59	$308 13
By J. L. Wilson	50	
C. A. Williams	1	
War Department	3 50	
		568 60
Excess of repayments		260 47

Barracks and quarters, 1883:

To W. G. Cochran	50 00
S. M. Green	36 00
C. A. Haman	21 00
H. G. Litchfield	216 00
M. Openheimer	8 00
C. Payson	26 66
W. H. Pender	6 30
E. J. Robinson	800 00
W. H. Wilkes	4 00
M. White	106 67
	1,274 63

Deduct from repayments:		
By E. B. Atwood	$7 59	
R. N. Batchelder	981 74	
C. A. Booth	14 73	
J. D. Bingham	193 18	
A. Barrett	1 89	
G. R. Cecil	2 80	
R. H. Day	242 99	
G. B. Davis	1 96	
G. B. Dandy	496 64	
E. Davis	10	
James Gilliss	16 79	
W. Gerlach	52	
H. C. Hodges	47 69	
E. B. Hubbard	3 33	
W. B. Hughes	124 78	
M. F. Jamar	1 06	
D. H. Kelton	2 11	
J. G. C. Lee	810 83	
J. H. Lord	5 00	
A. E. Miltimore	1 05	
J. M. Moore	264 69	
J. B. McDonald	1 00	
Missouri Pacific R. R. Co	46	
W. Mott	4 00	
M. M. Maxon	2 00	
J. A. Olmstead	1 43	
G. T. T. Patterson	3 93	
C. G. Starr	72	
J. W. Scully	3 72	
C. G. Sawtelle	44 09	
R. Saxton	32 27	
L. H. Strother	3 83	
C. H. Tompkins	12 41	
G. H. Weeks	95	
D. D. Wheeler	208 69	
P. G. Wood	90	
War Department	7 43	
		3,549 30
Excess of repayments		2,274 67

Barracks and quarters, 1884:

To H. L. Abbot, colonel	400 00
R. N. Batchelder, colonel	8,470 21
J. D. Bingham, colonel	135,031 81
J. H. Belcher, major	3,032 00
C. A. Booth, captain	1,749 22
G. H. Cook, captain	1,854 85
W. G. Cochran	400 00
G. B. Dandy, major	66,285 28
J. J. Dana, colonel	16,277 06
J. A. Ekin, colonel	300 00
S. S. Elder, major	800 00
Jas. Gilliss, captain	47,564 36
S. J. Griswold	121 66
H. C. Hodges, colonel	52,734 95
Carrried forward	335,111 40

Barracks and quarters, 1884—Continued.

Brought forward	$335,111 40
To C. H. Hoyt, captain	3,244 00
W. B. Hughes, major	100 00
L. Hobbs, major	248 90
A. S. Kimball, captain	9,098 50
J. G. C. Lee, major	42,004 13
M. I. Ludington, colonel	3,133 62
J. L. Lusk, lieutenant	777 06
J. A. Latta	163 63
J. M. Moore, colonel	63,214 08
A. J. McGonnigle, major	6,665 00
A. E. Miltimore, captain	12,134 98
O. E. Michaelis, captain	338 00
W. P. Martin, captain	393 30
A. S. M. Morgan, captain	172 20
A. J. Perry, colonel	22,380 47
C. A. Reynolds, major	370 00
C. G. Sawtelle, major	38,875 52
R. Saxton, colonel	9,121 92
C. H. Tompkins, colonel	32,135 08
G. H. Weeks, major	118,490 29
D. D. Wheeler, captain	126 00
W. Wilkinson, major	57 00
	698,355 08

Deduct repayments:		
By D. H. Clark	$3 60	
G. K. Hunter	75	
War Department	3 00	
		7 35
		698,347 73

Fifty per centum of arrears of Army transportation due certain land-grant railroads, 1881:

To Atchison, Topeka and Santa Fé R. R	993 60
Chicago, Saint Paul, Minn. and Om. R. R	4,422 93
Hannibal and Saint Joe R. R.	51 37
Illinois Central R. R	739 23
Kansas City, Lawrence and Southern Kansas R. R	156 64
Louisville and Nashville R. R.	588 73
Mobile and Montgomery R. R.	416 53
Northern Pacific R. R	589 36
Pensacola R. R	88 23
South and North Alabama R. R	278 99
	8,325 61

Fifty per centum of arrears of Army transportation due certain land-grant railroads, 1882:

To Atchison, Topeka and Santa Fé R. R	166 79
Chicago, Saint Paul, Minn. and Om. R. R	3,565 59
Chicago and North Western R. R	26 49
Chicago, Milwaukee and Saint Paul R. R	79 39
Hannibal and Saint Joe R. R.	257 27
Louisville and Nashville R. R	1,102 79
Northern Pacific R. R	3,750 07
Saint Paul, Minneapolis and Manitoba R. R	1,529 18
Saint Paul and San Francisco R. R	8 51
	10,486 08

Fifty per centum of arrears of Army transportation due certain land-grant railroads, 1883:

To Atchison, Topeka and Santa Fé R. R	26,096 55
Chicago, Saint Paul, Minn. and Om. R. R	7,057 35
Carried forward	33,153 90

Fifty per centum of arrears of Army transportation due certain land-grant railroads, 1883—Cont'd.		
Brought forward		$33,153 90
To Chicago and North Western R. R		925 74
Chicago, Rock Island and Pacific R. R		14 00
Florida Transit R. R		3 40
Hannibal and Saint Joe R. R.		51 57
Kansas City, Lawrence and Southern Kansas R. R		17 53
Louisville and Nashville R. R.		274 64
Missouri Pacific R. R		68 50
Northern Pacific R. R		11,874 58
Saint Louis and San Francisco R. R		375 71
Saint Paul, Minneapolis and Manitoba R. R		3,619 79
		50,379 36
Fifty per centum of arrears of Army transportation due certain land-grant railroads, 1884:		
To Atchison, Topeka and Santa Fé R. R		16,323 87
Chicago, Saint Paul, Minn. and Om. R. R		525 84
Chicago and North Western R. R		561 57
Missouri Pacific R. R		70 82
Northern Pacific R. R		2,561 04
Saint Louis and San Francisco R. R		183 25
		20,226 39
Deduct repayments:		
By War Department		18 60
		20,207 79
Transportation of Army and its supplies, 1881 and prior years (transfer account):		
To H. A. Davidson		1,464 00
T. B. Hunt		30 00
G. H. Weeks		31 00
		1,525 00
Deduct from repayments:		
By R. N. Batchelder	$10 00	
B. W. Bradley	39	
C. A. W. Cunningham	1 12	
G. B. Dandy	50	
S. P. Ferris	4 39	
W. B. Hughes	56 30	
T. B. Hunt	30 00	
C. G. Sawtelle	3,140 93	
G. W. Schofield	1 50	
T. F. Tobey	200 00	
Union Pacific R. R.	9 10	
G. H. Weeks	28 00	
G. B. Walker	3 00	
War Department	3,497 23	
		6,982 46
Excess of repayments		5,457 46
Transportation of the Army and its supplies, 1881:		
By W. R. Abercrombie	$550 00	
C. G. Ayers	16 34	
E. B. Atwood	4 70	
John S. Bishop	1 00	
G. W. Bradley	31	
O. B. Boyd	67 50	
D. H. Burnham	94	
J. W. Bean	11 40	
R. N. Batchelder	25	
M. Bryant	6 15	
J. F. Cummings	1 00	
Carried forward	659 59	

Transportation of the Army and its supplies, 1881—Continued.		
Brought forward		$659 59
By James Curry		1 71
D. H. Clark		3 33
T. Cruse		93
J. H. Coale		2 66
D. J. Craigie		11 04
T. B. Capron		5 00
D. Cornman		132 72
G. B. Dandy		1 00
J. A. Ekin		27 45
C. W. Foster		1 54
W. L. Geary		1 33
J. F. Guilfoyle		13 25
H. C. Hodges		12 10
J. F. Haskell		17 28
C. H. Hoyt		21 39
F. H. Hathaway		10 00
A. S. Kimball		57 80
T. T. Knox		4 52
J. G. C. Lee		259 07
J. M. Moore		31 94
T. W. Morrison		06
F. Marsh		110 00
J. A. Maney		12 00
C. H. Noble		05
J. J. O'Connell		2 00
S. S. Payne		1 33
J. W. Powell		3 34
C. D. Parkhurst		2 67
F. E. Pierce		8 33
J. A. Payne		1 00
D. Robinson		3 51
W. F. Rice		2 00
G. R. Smith		3 33
John Simpson		7 20
C. A. Steadman		32 67
G. C. Smith		56 72
J. H. Spencer		16 50
F. Thorp		65
E. L. Verland		30 45
H. Wygard		2 45
H. H. Wright		1 00
P. G. Wood		1 20
W. W. Wotherspoon		2 00
J. T. Weston		14 13
War Department		715 19
		2,305 43
Transportation of the Army and its supplies, 1882:		
To American Express Company		$3 98
Atchison, Topeka and Santa Fé R. R		8,820 48
Baltimore Steam Packet		47 00
Bogert & Morgan		38 19
L. L. Blake		50
Baltimore and Ohio R. R		25 90
Chicago, Saint Paul, Minn. and Om. R. R		6 20
Chicago, Burlington and Quincy R. R		51 00
Central Pacific R. R		26 40
Connecticut River R. R		15 00
Chesapeake and Ohio R. R		4 55
Chicago, Milwaukee and Saint Paul R. R		115 26
Chicago, Rock Island and Pacific R. R		13
J. Culbertson		50 00
D. Cornman		132 64
D. H. Clark		3 40
Denver and Rio Grande R. R.		445 65
Dunbar Bros		60
J. E. Davidson		142 64
Dentz & Kockler		33 25
F. T. Evans		53 44
E. Fenlon		22 31
H. R. Hyde		8 00
F. H. Hathaway		10 00
Illinois Central R. R		54 91
Carried forward		10,111 47

Transportation of the Army and its supplies, 1882—Continued.		
Brought forward		$10,111 47
By Inland and Seaboard Coasting Co		2 76
Kansas City, Lawrence and Southern Kansas R. R		22 23
Kentucky Central R. R		5 40
Leavenworth Bridge Company		66 00
Louisiana and Texas R. R		4 08
W. M. D. Lee		360 71
Missouri Pacific R. R		1,249 64
Morgan's L. and S. R. R. and Steamship Co		3 37
Northern Pacific R. R		44 30
Norton & Stewart		30 25
F. Nicolay		27 00
Oregon R. and Navigation Co.		9 35
Pacific Coast Steamship Company		1 00
Pittsburgh, Cincinnati and Saint Louis R. R		3 03
Potomac Steamboat Company		74
C. E. Rood		20 64
Saint John's R. R		25 10
Saint Paul M. and M. R. R		274 64
Saint Louis and Saint Paul R. R		45 32
Siskyou Wagon Road Company		56 00
P. R. Tully		19 69
Tripp & Underwood		3 37
Wicomico and Pocomoke R. R		6 25
War Department		7 42
		12,399 72
Deduct from repayments:		
By E. B. Atwood	$0 75	
E. P. Andrus	1 17	
Atchison, Topeka and S. F. R. R	29 13	
R. N. Batchelder	135 00	
J. H. Belcher	1,711 34	
John Carland	10 00	
D. H. Clark	3 40	
W. H. Carter	15 85	
C. D. Cowles	2 00	
L. E. Campbell	119 36	
H. Cushman	17 43	
J. M. Califf	1 66	
G. B. Davis	53 79	
G. B. Dandy	13 44	
W. S. Davis	10 00	
J. A. Ekin	11 72	
F. H. Edmunds	50	
J. V. Furey	10 92	
L. C. Forsyth	156 39	
E. B. Grimes	23,177 30	
E. B. Gibbs	49	
M. B. Hughes	82 50	
H. C. Hodges	2 77	
J. A. Maney	29 90	
W. P. Martin	7 20	
G. H. Morgan	1 58	
J. D. Nickerson	1 00	
F. E. Phelps	6 06	
D. C. Pearson	5 80	
F. W. Roe	2 59	
G. L. Scott	104 00	
G. C. Smith	12 00	
Jno. Smith	2 94	
L. H. Strother	20	
E. J. Strang	6 27	
C. H. Tompkins	6 39	
C. W. Taylor	2 00	
A. M. Weatherill	10 07	
G. H. Weeks	9 37	
N. Wolf	16 40	
War Department	537 24	
		26,327 92
Excess of repayments		13,928 20

Transportation of the Army and its supplies, 1882 (transfer account):		
By Union Pacific R. R	$17 30	
Transportation of the Army and its supplies, 1883:		
To E. B. Atwood, captain		$1,295 85
Atchison, Topeka and Santa Fé R. R		10,429 05
A. A. Allen		6 00
Arizona and New Mexico R. R		4 48
J. E. Atherton		3 40
Atlantic and Pacific R. R		3,575 35
Atlantic and West Point R. R		144 91
J. F. Ayers		18 00
A. G. Brackett		171 80
Boston Daily Advertiser		3 60
Bragan & Co		1 00
J. C. Bowen		11 00
Sam. Bowman		32 20
W. F. Banning		2 50
Baltimore Steam Packet Company		8 50
Bernard Kelly & Son		1,120 00
Baker & Johnson		770 94
Baltimore and Ohio R. R		3 64
A. Barclay		289 46
W. V. Brown		133 87
Baltimore and Potomac R. R		1 86
R. L. Belknap		2,564 03
Burlington and Cedar Rapids Northern R. R		4 55
H. Bruner		27 66
J. W. Crawford		5 00
Central Pacific R. R		71 33
A. A. Call		15 00
Chicago, Burlington and Quincy R. R		70 19
Chicago, Saint Louis and New Orleans R. R		85
Chicago, Saint Paul, Minn. and Om. R. R		133 63
Chicago and Grand Trunk R. R		100 73
Chicago and Alton R. R		290 13
Chesapeake and Ohio R. R		44 00
Chicago, Rock Island and Pacific R. R		1,534 65
Chicago and North Western R. R		3,912 95
Chicago, Milwaukee and Saint Paul R. R		4,297 20
D. B. Conger		3 25
Cooperstown and S. Valley R. R		4 00
Company A, Twenty-fifth Infantry		8 45
Cumberland Valley R. R		1 44
S. B. Coulson		1,701 81
Copper Queen Mining Company		9 25
J. E. Davidson		221 48
J. T. Dennis		15 00
Denver and Rio Grande R. R.		12,859 70
Delaware and Hudson Canal Company		5 31
Dayton and Lewiston Stage Company		3 50
C. Drown		1 00
Dowlin & Lesnet		75
F. T. Evans		1,986 67
J. H. Edson		135 00
Florida Transit and P. and F. and J. R. R		10 22
Fort Worth and Denver City R. R		550 10
N. Fisher		2,465 26
Fort Bowie and T. Stage Company		7 50
H. Fay		1 50
Jed Fry & Co		512 64
F. E. Gravel		81 00
Gilmer, Salisbury & Co		300 30
Carried forward		51,984 44

Transportation of the Army and its supplies, 1882 (transferr account)—Continued.		
Brought forward	$51,984	44
To Goodrich Transportation Company	6	00
Georgia R. R	6	97
H. C. Hodges, colonel	6,700	00
Hannibal and Saint Joseph R. R	11	16
J. Humphries	48	00
Hot Springs R. R	6	00
J. G. Hinkel	4	00
Indiana, Bloomington and West. R. R	78	59
Inland and Seaboard Coasting Company	71	32
Illinois Central R. R		55
J. S. Johnson	4	00
Knox Express Company	6	21
W. Kelly	362	29
Kentucky Central R. R	16	75
Kansas City, Lawrence and Southern Kansas R. R	5,000	00
J. G. C. Lee, major	8	25
Lordsbury and S. City Stage Company	385	32
Lake Shore and Michigan Southern R. R	66	29
Lake Michigan and Lake S. T. Co	6	75
Lyons & Markley	8	00
H. Linderman	1	75
Isaac Lloyd Stage Company	20	17
E. N. Meekers	3	50
B. W. Magin	118	07
B. W. Magin & Co	21	31
Missouri Pacific R. R	12,344	02
Jas. Morgan	63	99
C. H. Mallory & Co	443	74
P. W. McAdow	15	50
H. E. Manchester	3	05
Marine Steamship Company	13	44
Minneapolis and Saint Louis R. R	46	90
S. T. Maupin	18	00
D. Murphy & Son	2	50
New Mexico and Arizona R. R.	123	22
New York and Charleston Steamship Company	28	16
Northern Pacific R. R	582	91
New York and West Shore R. R	1	96
N. C. R. R	14	89
Overland Stage Company	2	00
Oregon Railway and Navigation Co	3,973	57
W. D. Owens	6	16
E. O. C. Ord	99	35
R. H. Patten	206	96
T. C. Power	2,598	08
Pennsylvania Co	10	92
Pullman Palace Car Co	34	00
Pittsburgh, Cincinnati and Saint Louis R. R	33	45
Philadelphia and Reading R. R	8	08
Pleasant Porter	1	50
Potomac Steamboat Company.		25
A. S. Parkin	25	50
Reilly & Wolford	19	00
Richmond and Danville Company	8	50
J. P. Rankin	795	02
Jno. Rickey	50	00
Rome, Watertown and Ogdensburgh R. R	62	64
R. Saxton, colonel	13,467	44
E. J. Strong, major	633	06
Silver City, D. and Pacific	58	00
Southwestern Stage Company.	221	00
Saint Louis and San Francisco R. R	89	69
St. Johns R. R	72	53
Carried forward	101,124	67

Transportation of the Army and its supplies, 1882 (transfer account)—Continued.		
Brought forward	$101,124	67
To Saint Louis and Saint Paul R. R	1	05
Snodgrass & Miner	248	01
C. Summerhausen	2	85
Siskon Wagon Road Company	4	00
Saint Paul, Minneapolis and Manitoba R. R	311	14
Saint Louis, Alton and Terre Haute R. R	23	54
C. H. Tompkins	12,038	61
Tripp & Underwood	2	70
Texas Mexican R. R	1	86
Utica and Black River R. R	4	73
Utah Central R. R	351	79
Utah, Idaho and Oregon Stage Company	458	00
Vaile, Miner & Co	489	04
Western Development Company	258	50
J. L. Whiteside	2	40
G. H. Weeks	1,000	00
W. Woods	42	00
Wyoming Stage Company	104	00
W. S. Wetzel	194	11
Western R. R	1	55
H. Wadsworth	22	45
J. M. Washburn	4	00
War Department	1	50
C. Yost	2	50
	116,695	00
Deduct from repayments:		
By E. B. Atwood	$8,597	20
E. P. Andrus	2	34
W. Badger	1	21
J. J. Brereton	1	00
C. A. Booth	3,730	28
R. N. Batchelder	3,025	88
D. R. Burnham	60	42
J. D. Bingham	113,297	50
J. Y. F. Blake	1	66
E. H. Brown	2	67
W. J. Campbell	147	00
G. R. Cecil	124	98
G. K. Cook	13	75
L. E. Campbell	916	41
G. A. Cornish	4	66
R. H. Day	538	95
R. C. Drum	75	10
G. B. Davis	6	01
G. B. Dandy	1,884	46
B. Davis	100	00
H. C. Danes	1	00
F. A. Edwards	23	25
L. C. Forsyth	6	66
E. B. Grimes	37	54
Jas. Gilliss	3	19
W. L. Geary	33	32
M. J. Grealish	6	00
W. Gerlach		61
C. B. Gatewood	3	34
H. O. S. Heistand	38	06
L. R. Hare	6	00
H. C. Hodges	2,117	28
C. H. Hoyt	26	58
F. H. Hathaway	18	41
W. B. Hughes	2	42
C. L. Hodges	3	33
J. W. Jacobs	1	50
D. H. Kelton	2	00
G. H. Kinzie	30	21
F. M. H. Kendricks	1	17
A. S. Kimball	46	20
J. I. Kane	1	00
J. H. Lord	3,629	00
W. P. Martin	173	10
C. A. H. McCauley	19	96
A. S. M. Morgan	70	66
O. B. Mitcham	305	90
F. H. Mills	1	50
Carried forward	139,140	67
	116,695	00

Transportation of the Army and its supplies, 1883—Continued.			
Deduct from repayments:			
Brought forward..		$139,140 67	$116,695 00
By C. McKeever		65 12	
W. H. Miller		17 75	
M. M. Maxon		7 00	
J. M. Marshall		5,163 42	
J. A. Olmstead		5 00	
A. M. Patch		05	
Jno. Pitman		12 75	
J. H. H. Peshine		2 97	
F. H. Phipps		4 00	
D. C. Pearson		6 69	
J. M. Porter		15 05	
F. E. Phelps		2 00	
W. V. Richards		1 00	
A. G. Robinson		9 50	
C. A. Reynolds		125 85	
A. J. Russell		40	
W. W. Robinson		1 00	
G. L. Scott		45 12	
S. Smith		151 62	
E. J. Strang		30 25	
J. W. Scully		1 15	
C. G. Sawtelle		61 83	
R. Saxton		2,082 26	
R. R. Stevens		88 00	
Jno. Simpson		5,456 36	
C. A. Steadman		9 00	
C. G. Starr		1 00	
C. H. Tompkins		15,498 46	
S. C. Vedder		4 00	
F. Wheeler		114 88	
G. H. Weeks		10,973 77	
J. P. Walker		1 90	
D. D. Wheeler		1,080 99	
War Department		2,525 19	
D. J. Young		287 64	
			182,993 64
Excess of repayments..			66,298 64
Transportation of the Army and its supplies, 1884:			
To Adams Express Company			2 00
R. N. Batchelder, colonel			45,060 42
J. D. Bingham, colonel			341,822 35
J. H. Belcher, major			4,172 27
Buford & Glinden			49 00
W. Badger, captain			2,507 65
F. Baker, lieutenant			15 00
C. A. Booth, captain			35,342 70
A. P. Blunt, captain			2,923 89
A. G. Brackett, colonel			15 90
G. H. Cook, captain			5,369 47
J. B. Campbell, captain			8 25
G. B. Dandy, major			315,715 97
J. J. Dana, colonel			10,564 68
W. H. Damsel			3 35
J. A. Ekin, colonel			7,548 30
J. H. Edson			75 00
S. Ferris			31 92
D. W. Flagler, colonel			816 40
W. M. Friling			14 00
N. Fisher			24 97
M. J. Grealish, captain			294 00
W. B. Gordon, major			400 00
Jas. Gilliss, major			389,458 63
H. C. Hodges, colonel			173,598 28
C. H. Hoyt, captain			946 65
W. B. Hughes, major			165 00
T. H. Handbury, captain			24 73
E. Hutchins			58 33
A. S. Kimball, captain			244,998 98
J. G. C. Lee, major			137,422 35
M. I. Ludington, colonel			58,079 46
W. W. Lyon, lieutenant			26 50
Louisville, Evansville and Saint Louis R. R			24 00
Little Rock, Mississippi River and Texas R. R			1 90
J. M. Moore, colonel			514,264 34
A. J. McGonnigle, major			218,722 50
Carried forward			2,510,569 14

Transportation of the Army and its supplies, 1884—Continued.			
Brought forward			$2,510,569 14
To O. B. Mitcham, lieutenant			436 00
A. S. M. Morgan, captain			160 00
O. F. Michaeles, captain			885 96
A. E. Miltimore, captain			8,841 77
McConé & Williamson			147 00
Missouri Pacific R. R			4,948 75
W. P. Martin			325 00
C. C. Morrison			269 40
New Mexico and Arizona R. R			16 50
J. E. Olds			2 15
F. H. Phipps			25 00
A. J. Perry, colonel			104,128 81
T. C. Power			825 00
G. E. Pond, captain			2,348 50
Pierre and Fort Bennett Stage Company			56 00
H. S. Parkin			7 00
Pacific Improvement Co			113 00
C. A. Reynolds, major			575 30
A. H. Russell, captain			261 00
Jas. Rogers			31 50
C. G. Sawtelle, captain			60,908 39
E. J. Strong, captain			100 00
R. Saxton, colonel			71,758 97
W. R. Sutley			56 00
Silver City, D. and P. R. R			220 40
J. H. Segar			137 06
J. W. Scully			30 00
Spearfish Stage Company			31 50
Saint Louis and Alton R. R			2 85
Saint Louis and Saint Paul Packet Company			52 23
Saint Louis and San Francisco R. R			83 00
C. H. Tompkins, colonel			484,750 00
U. U. Express Company			31 76
G. H. Weeks, major			133,642 61
Western Development Company			30 00
W. and Fort Sisseton Stage Company			2 50
D. D. Wheeler, captain			736 37
War Department			1,500 00
Western Stage Company			7 00
D. J. Young, captain			200 00
B. E. Yarmon			2 50
			3,389,255 92
Deduct repayments:			
By R. N. Batchelder		$2,429 50	
E. H. Browne		12 65	
S. E. Clark		30 00	
D. H. Clark		99	
G. B. Dandy		32 00	
T. J. Eckerson		9 80	
C. B. Gatewood		74 00	
E. E. Hardin		46 00	
T. S. Mumford		14 62	
J. M. Marshall		20 50	
J. Newton		9 25	
D. C. Pearson		4 09	
W. T. Rice		10 95	
Jno. Simpson		4 97	
C. H. Tompkins		138 00	
War Department		972 85	
			3,810 17
			3,385,445 75
Transportation of the Army and its supplies, Pacific Railroads, 1881:			
To Central Pacific R. R			100 49
Kansas Pacific R. R			2,588 34
Union Pacific R. R			560,977 61
			563,666 44
Transportation of the Army and its supplies, Pacific Railroads, 1882:			
To Central Pacific R. R			29 74
Union Pacific R. R			509,461 07
			509,490 81

Transportation of the Army and its supplies, Pacific Railroads, 1883:

To Central Pacific R. R	$22,133 27	
Sioux City and Pacific R. R	16 90	
Union Pacific R. R	389,400 47	
		411,550 64

Transportation of the Army and its supplies, Pacific railroads, 1884:

To Central Pacific R. R	11,806 96	
Sioux City and Pacific R. R	124 02	
Union Pacific R. R	89,396 85	
		101,327 83

Horses for cavalry and artillery, 1882:

By War Department	$127 50	

Horses for cavalry and artillery, 1883:

To R. Saxton, colonel		9,000 00
Deduct repayments:		
By J. J. Brereton	$115 00	
A. H. Budlong	135 00	
G. H. Cook	175 00	
M. F. Goodwin	284 00	
C. B. Hinton	100 00	
L. R. Hare	135 00	
J. G. C. Lee	41 66	
J. H. Lord	75 00	
F. H. Mills	140 00	
J. A. Olmstead	124 00	
A. M. Patch	160 00	
J. O. Shelby	124 50	
J. A. Swift	10 00	
C. G. Sawtelle	45 00	
G. H. Weeks	30 50	
War Department	39 00	
D. D. Wheeler	300 00	
		2,033 66
		6,966 34

Horses for cavalry and artillery, 1884:

To E. B. Atwood, captain		5,000 00
J. D. Bingham, colonel		150 00
G. B. Dandy, major		23,650 00
Jas. Gilliss, major		18,340 00
C. H. Hoyt, captain		2,000 00
J. G. C. Lee, major		20,210 00
J. M. Moore, colonel		15,020 00
A. J. Perry, colonel		10,350 00
G. E. Pond, lieutenant		37,650 00
C. G. Sawtelle, major		2,250 00
G. H. Weeks		50,000 00
		184,620 00
Deduct repayments:		
By L. E. Campbell	$382 98	
G. A. Cornish	259 00	
Jno. Carland	110 00	
G. B. Dandy	107 00	
T. F. Forbes	145 92	
J. V. Furey	267 40	
J. O. Green	114 68	
R. W. Hoyt	114 68	
L. R. Hare	122 95	
T. B. Hunt	200 00	
J. T. Kerr	300 00	
J. A. Olmstead	150 00	
W. Quinton	124 00	
F. W. Roe	145 92	
B. Reynolds	265 00	
D. D. Wheeler	150 00	
J. H. Waters	110 00	
J. L. Wilson	50 00	
		3,119 53
		181,500 47

Clothing and camp and garrison equipage, 1881:

By E. B. Atwood	$2 47	
G. H. Burton	1 23	
G. R. Burnett	11 56	
H. L. Bailey	100 47	
W. C. Bartlett	97	
R. N. Batchelder	16 60	
D. L. Craft	6 44	
H. Clayton	27 41	
E. Cusshman	8 59	
F. M. Coxe	91	
E. S. Chapin	3 35	
W. O. Cory	5 50	
J. W. Clous	29 78	
W. Everett	57 16	
E. L. Fletcher	42	
F. S. Foltz	87 15	
F. S. Forsyth	185 88	
E. B. Fuller	4 59	
J. F. Guilfoyle	4 56	
C. Gardner	2 36	
L. R. Hare	46	
H. L. Haskell	60 35	
R. Hanna	6 00	
M. B. Hughes	44 45	
G. Howard	40	
G. Ilges	19 52	
C. King	1 16	
F. F. Kingsbury	34 80	
J. T. Kerr	19 06	
W. Krance	96 42	
T. C. Lebo	1 00	
W. H. Miller	70	
M. M. Maxon	1 27	
C. B. McClellan	1 04	
F. Marsh	1 34	
L. A. Matile	10 26	
S. C. Mills	64 78	
C. H. Noble	38	
J. B. Nixon	55 50	
J. R. Pierce	23 50	
G. A. Purrington	60	
J. A. Payne	3 93	
C. A. Steadman	78	
Wm. Stanton	210 06	
H. L. Scott	6 82	
H. J. Slocum	96	
L. H. Strother	40	
J. W. Scully	5 17	
C. P. Stivers	2 96	
W. E. Turner	28	
J. P. Thompson	140 72	
H. H. Theaker	2 01	
G. Valvis	4 39	
J. S. Witcher	23 21	
C. H. Whipple	6 79	
E. W. Ward	81 94	
H. H. Wright	2 68	
M. C. Wessells	22	
J. P. Willard	1 00	
		1,494 71

Clothing and camp and garrison equipage, 1881 and prior years (transfer account):

To J. W. Ingalls		$6 39
F. Myers		14 00
		20 39
Deduct repayment:		
By Union Pacific R. R		4 50
		15 89

Clothing and camp and garrison equipage, 1882 (transfer account):

By Union Pacific R. R	$2 54	
Union Pacific R. R	3 93	
		6 47

Clothing and camp and garrison equipage, 1882:		
By C. G. Ayers	$7 40	
R. F. Ames	3 12	
Atlantic and Pacific R. R	47 12	
D. N. Bash	60 47	
J. E. Blaine	48 84	
A. E. Bates	2 88	
G. R. Burnett	13 11	
J. P. Baker	44 26	
C. R. Barnett	22 00	
J. J. Brereton	7 28	
H. Clayton	91 70	
H. Clothing	3,36	
C. D. Cowles	15 18	
W. H. Comegys	24 79	
H. Cushman	1 69	
S. E. Clark	11 83	
W. O. Clark	3 93	
W. H. Eckels	39	
C. A. Earnest	1 46	
F. S. Foltz	106 43	
E. E. Gayle	4 00	
W. L. Geary	44	
W. Gerlach	13 97	
W. Hoffman	96	
M. B. Hughes	42 56	
H. F. Kendall	8 84	
E. Lloyd	4 07	
T. W. Lord	478 05	
H. C. La Point	12 94	
J. G. C. Lee	31 97	
J. M. Marshall	2 60	
C. McKibben	58	
T. D. Maurice	9 98	
W. V. Richards	20	
A. Sharp	62 70	
C. A. Steadman	38 59	
G. C. Smith	2 60	
L. H. Strother	1 04	
C. J. Wilson	16 52	
C. H. Whipple	41 90	
J. S. Witcher	10 00	
P. G. Wood	18 23	
J. H. G. Wilcox	50	
	1,320 48	
Clothing and camp and garrison equipage, 1883:		
To J. A. Ekin, colonel	$462 00	
M. I. Ludington, colonel	179,538 13	
C. G. Sawtelle, colonel	164 45	
	180,164 58	
Deduct repayments:		
By W. Arthur	$3,073 46	
L. S. Ames	151 07	
E. B. Atwood	6 75	
E. P. Andrus	69	
J. H. Belcher	23 12	
R. P. Brown	26 11	
D. N. Bash	8,394 31	
A. Barrett	99 31	
T. H. Barry	96 52	
J. E. Blaine	5,263 06	
J. P. Baker	6,254 35	
J. S. Brisbin	17 70	
W. Badger	18 69	
G. W. Baird	1,873 87	
A. E. Bates	819 39	
R. N. Batchelder	3 00	
J. J. Brereton	27 21	
A. H. Budlong	11 66	
H. L. Bailey	23 11	
G. Barrett	39 53	
C. H. Barrett	34 22	
D. H. Brush	24 48	
C. Bird	2 25	
G. M. Bascom	9 03	
W. J. Campbell	171 90	
F. M. Coxe	389 83	
Carried forward	26,854 62	180,164 58

Clothing and camp and garrison equipage, 1883—Continued.		
Deduct repayments:		
Brought forward	$26,854 62	$180,164 58
By W. E. Creary	4,061 13	
H. Clayton	3,496 81	
S. R. Colladay	58	
W. O. Cory	83 36	
Jno. Carland	44 05	
G. H. Cook	17 31	
C. D. Cowles	24 44	
W. H. Comegys	7,462 79	
J. P. Canby	4,896 23	
G. W. Candee	973 83	
F. L. Carrington	32 34	
W. H. Carter	30 60	
E. Chenowyth	38 02	
G. A. Cornish	15 58	
L. E. Campbell	11 28	
D. H. Clarke	53 80	
S. E. Clarke	102 51	
T. H. Capron	23 80	
H. Carroll	27	
Chicago, Saint Paul, M. and O. R. R	38	
J. F. Cummings	45	
P. Cusack	2 52	
E. Davis	27 67	
I. O. Dewey	3,230 30	
T. F. Davis	2 96	
F. S. Dodge	215 55	
G. B. Davis	59 86	
J. Drum	91 38	
B. Davis	725 62	
W. H. Eckels	563 95	
J. A. Ekin	1 70	
C. P. Elliott	34 16	
C. A. Earnest	65 43	
F. A. Edwards	26 65	
R. T. Earle	13 15	
J. T. Furey	33 15	
T. F. Forbes	77 04	
D. H. Floyd	1 00	
M. F. Goodwin	7 72	
W. L. Geary	4 26	
Jas. Gilliss	8 02	
C. Gardner	30 60	
E. A. Godwin	5 56	
W. H. Gill	62 85	
W. R. Gibson	1,409 42	
W. Gerlach	81 81	
J. G. Galbraith	89 98	
J. O. Green	25 51	
G. E. Glenn	282 01	
G. A. Hull	23 56	
C. B. Hinton	13 32	
C. C. Hodge	2 34	
J. A. Hutton	8 38	
P. P. G. Hall	1,201 26	
E. E. Hardin	244 42	
W. Howe	4 18	
H. C. Hodges	91 85	
W. H. Hamner	42 84	
L. R. Hare	57 55	
F. H. Hathaway	4 16	
R. W. Hoyt	49 45	
T. B. Hunt	3 20	
W. P. Hall	10 07	
H. O. Heistand	16 46	
C. Hay	21 75	
P. Hasson	56 40	
J. T. Honeycutt	40 28	
W. F. Harmon	4 99	
C. Humphrey	1 99	
C. L. Hodges	5 80	
G. S. Hoyt	128 35	
J. F. Heuston	36 64	
W. Hoffman	25	
J. W. Jacobs	43 46	
W. H. Jacobs	1,483 57	
C. P. Johnson	19 18	
F. B. Jones	20 11	
D. H. Kelton	18 58	
Carried forward	59,058 40	180,164 58

Clothing and comp and garrison equipage, 1883—Continued.			
Deduct repayments:			
Brought forward	$59,058 40	$180,164 58	
By H. M. Kendall	104 87		
J. B. Keefer	239 41		
A. S. Kimball	5 74		
T. W. Lord	53 69		
D. R. Larned	2,374 99		
J. H. Lord	607 00		
J. G. Leefe	44 74		
W. Mott	21 56		
J. M. Marshall	9 48		
J. A. Maney	42 73		
W. H. Miller	49 70		
J. C. Muhlenberg	5,227 44		
W. M. Maynadier	6,820 76		
T. S. Mumford	84 82		
F. H. Mills	66 58		
C. P. Miller	6 35		
G. H. Morgan	43 05		
J. M. Moore	244 71		
D. McClure	751 85		
C. McClure	651 67		
J. Newton	35 54		
J. A. Olmstead	17 84		
J. J. O. Brien	20 09		
J. W. Powell	12 29		
J. H. H. Peshine	59 74		
A. M. Patch	70 71		
T. T. Peterson	22 27		
D. C. Pearson	129 75		
R. D. Potts	1 13		
C. G. Penny	14 29		
W. L. Pitcher	9 97		
G. T. T. Patterson	99 44		
N. P. Phister	31 12		
J. M. Porter	175 09		
D. C. Poole	3,537 44		
C. D. Parkhurst	3 00		
W. Quinton	95 47		
A. J. Russell	7 72		
J. R. Roche	53 76		
G. F. Robinson	1,334 78		
J. Reagan	9 68		
A. H. Russell	24 66		
W. A. Rucker	1,327 40		
R. C. Ripley	97 14		
J. M. Ross	55 85		
H. J. Reilly	14		
F. W. Roe	98 31		
P. H. Ray	41 11		
J. F. Simpson	71 77		
I. O. Shelby	39 15		
R. R. Stevens	5 34		
W. Smith	3,802 04		
R. Smith	3,117 49		
C. C. Sniffin	3,295 38		
T. C. H. Smith	363 76		
W. H. Smith	5,029 04		
T. H. Stanton	3,104 34		
J. W. Scully	46 26		
C. G. Starr	59 35		
G. H. Sands	93 71		
S. Smith	36 74		
J. A. Swift	6 32		
A. Sharp	5,980 32		
C. J. Sprague	732 57		
G. R. Smith	383 12		
D. F. Stiles	25 97		
G. L. Scott	25 74		
R. Saxton	689 98		
J. Stafford	50		
G. C. Smith	68 49		
A. C. Sharp	11 57		
W. F. Tucker	6,171 91		
F. Thies	1 43		
A. S. Towar	4,620 47		
C. M. Terrell	3,280 27		
R. E. Thompson	14 36		
C. P. Terrett	37 13		
H. G. Thomas	2,322 41		
A. H. M. Taylor	26 67		
Carried forward	127,358 87	180,164 58	

Clothing and camp and garrison equipage, 1883—Continued.			
Deduct repayments:			
Brought forward	$127,358 87	$180,164 58	
By W. W. Tyler	1 74		
S. C. Vedder	56 18		
J. L. Wilson	84		
W. Wittich	22 86		
J. S. Witcher	361 79		
C. I. Wilson	1,932 26		
J. R. Wasson	1,010 81		
C. H. Whipple	8,996 34		
J. W. Wham	2,477 79		
C. W. Williams	46 44		
J. McA. Webster	16 95		
J. P. Willard	2,921 53		
W. W. Wotherspoon	6 38		
R. H. Wilson	21 97		
H. P. P. Wainwright	2 96		
P. G. Wood	64 92		
D. D. Wheeler	1 20		
W. S. Worth	84		
War Department	109 13		
		145,411 80	
		34,752 78	
Clothing and camp and garrison equipage, 1884:			
To W. Badger, captain		59,986 54	
J. D. Bingham, colonel		38 75	
J. H. Belcher, major		4 00	
A. P. Blunt, captain		89,726 60	
G. B. Dandy, major		268 75	
J. J. Dana, colonel		18 50	
J. A. Ekin, colonel		87,472 35	
Jas. Gilliss, major		78 98	
H. C. Hodges, colonel		100 00	
M. I. Ludington, colonel		898,029 27	
J. C. G. Lee, major		365 00	
J. M. Moore, colonel		1,000 00	
A. E. Miltimore, captain		49 50	
W. P. Martin, captain		396 22	
F. H. Phipps, captain		10 00	
A. J. Perry, colonel		425 25	
A. G. Robinson, colonel		13 54	
C. G. Sawtelle, colonel		145 25	
R. Saxton, colonel		179,144 49	
C. H. Tompkins, colonel		631 98	
G. H. Weeks, major		172,166 53	
War Department		18 38	
		1,490,089 88	
Deduct repayments:			
By L. S. Ames	$220 73		
J. C. Ayers	5 35		
E. P. Andrus	50		
A. A. Augur	166 45		
H. M. Andrews	12 54		
C. A. Alligood	97 08		
W. R. Abercrombie	207 55		
W. Arthur	2,524 59		
R. N. Batcheldor	2,751 93		
R. G. Brown	17 36		
D. H. Brush	65 24		
J. H. Belcher	25 74		
E. B. Bolton	108 06		
G. W. Baird	4,825 09		
C. A. Booth	44 01		
C. R. Barnett	222 81		
R. P. Brown	24 85		
W. C. Butler	3 74		
G. Barrett	169 38		
A. P. Blunt	15 00		
C. Bird	144 06		
J. J. Brereton	111 75		
H. L. Bailey	47 23		
A. H. Budlong	58 66		
T. H. Barry	187 10		
Kinzie Bates	8 62		
J. G. Ballance	121 62		
Carried forward	12,187 04	1,490,089 88	

Clothing and camp and garrison equipage, 1884—Continued.			
Deduct repayments:			
Brought forward		$12,187 04	$1,490,089 88
By J. P. Baker		7,393 70	
A. E. Bates		715 54	
J. E. Blaine		4,407 29	
D. H. Boughton		117 50	
D. N. Bash		2,129 21	
A. Barrett		16 40	
E. H. Brooke		3 50	
W. F. Blauvelt		20 39	
W. J. Campbell		27 94	
Jno. Carland		233 27	
G. H. Cook		109 65	
C. D. Cowles		51 40	
J. P. Canby		2,246 08	
D. H. Clark		224 50	
W. O. Cory		69 44	
G. A. Cornish		178 34	
G. R. Cecil		275 06	
P. Campbell		343 04	
W. E. Creary		596 06	
L. E. Campbell		223 45	
E. H. Crowder		50 97	
W. H. Carter		153 81	
L. A. Chamberlain		60 70	
J. L. Clem		18 90	
C. H. Cabaniss		309 09	
S. E. Clark		384 44	
E. S. Chapin		233 91	
T. H. Capron		85 52	
H. Clayton		4,809 68	
Thos. Connolly		7 30	
W. H. Comegys		5,034 49	
H. G. Cavenaugh		89 29	
T. M. Coxe		568 30	
G. W. Candee		112 42	
Edwd. Davis		40 50	
G. B. Dandy		15 62	
F. S. Dodge		36 95	
F. S. Dodge		3,606 97	
J. Drum		139 53	
I. O. Dewey		662 57	
G. C. Doane		32 40	
T. J. Eckerson		149 67	
F. H. E. Ebstein		24 22	
F. A. Edwards		146 98	
C. A. Earnest		175 66	
F. H. Edmunds		67 57	
R. T. Earle		92 69	
W. H Eckels		2,535 54	
T. F. Forbes		185 76	
L. C. Forsyth		18 36	
J. V. Furey		60 77	
D. H. Floyd		200 30	
C. W. Foster		7 52	
F. Fuger		28 13	
F. W. Foster		196 51	
W. H. Forwood		32 01	
Jas. Gilliss		100 75	
R. N. Gitty		34 21	
W. H. Gill		867 54	
J. H. Gustin		33 49	
E. J. Grumley		140 64	
J. G. Galbraith		206 03	
G. S. Grimes		2 20	
W. L. Geary		35 37	
W. R. Gibson		443 13	
E. F. Glenn		14 70	
C. Gardener		111 53	
E. Griffith		139 99	
E. A. Goodwin		61 80	
W. Girlach		240 47	
G. E. Glenn		1,949 15	
J. H. Gardner		20 45	
W. B. Gordon		15 23	
G. K. Hunter		46 00	
G. A. Hull		360 54	
C. L. Hodges		158 55	
W. B. Homer		21 30	
R. W. Hoyt		117 29	
E. E. Hardin		344 53	
Carried forward		57,408 74	1,490,089 88

Clothing and camp and garrison equipage, 1884—Continued.			
Deduct repayments:			
Brought forward		$57,408 74	$1,490,089 88
By F. H. Hathaway		71 81	
H. C. Hodges		12 64	
J. F. Huston		276 58	
W. Howe		41 08	
P. Hasson		124 23	
L. R. Hare		150 61	
R. Hanna		113 52	
C. H. Hoyt		11 16	
P. P. G. Hall		1,950 97	
J. T. Honeycutt		121 71	
M. F. Harmon		27 86	
T. B. Hunt		112 60	
H. O. S. Heistand		34 52	
W. H. Hamner		80 83	
F. H. Hardie		27 12	
H. H. Humphreys		11 34	
H. W. Hovey		106 13	
G. S. Hoyt		136 03	
W. P. Hall		108 49	
F. P. Jones		140 43	
C. P. Johnson		4 16	
M. F. Jamar		49 59	
W. H. Johnston		740 87	
A. S. Kimball		33 62	
D. H. Kelton		86 10	
L. W. V. Kennon		53 46	
H. M. Kendall		296 01	
J. T. Kerr		139 86	
J. B. Keefer		132 05	
J. H. Lord		50 70	
H. C. La Point		84 68	
D. R. Larned		1,173 73	
E. Lynch		71 33	
F. H. Mills		374 90	
A. E. Miltimore		41 75	
D. McClure		6 27	
A. L. Myer		49 87	
T. S. Mumford		204 00	
J. B. McDonald		169 50	
M. M. Maxon		285 43	
O. B. Mitcham		17	
A. H. Merrill		96 55	
G. H. Morgan		4 58	
W. H. Miller		126 70	
F. Michler		131 43	
C. P. Miller		17 98	
F. Marsh		88 40	
M. C. Martin		144 71	
C. H. McNally		53 61	
W. M. Maynadier		3,933 32	
W. Mott		49 95	
C. A. H. McCauley		32 69	
W. P. Martin		52 89	
C. McClure		813 29	
J. A. Maney		8 10	
J. M. Marshall		108 53	
J. C. Muhlenberg		2,146 29	
J. Newton		158 93	
H. B. Osgood		37 62	
J. A. Olmstead		104 60	
J. J. O'Brien		13 93	
D. C. Pearson		653 55	
F. H. Phipps		15 71	
R. D. Potts		21 01	
C. G. Penny		43 15	
D. C. Poole		2,523 65	
A. M. Patch		127 26	
J. H. H. Peshine		140 45	
F. E. Pierce		9 17	
G. T. T. Patterson		122 56	
W. S. Patten		69 85	
W. Quinton		127 97	
W. V. Richards		237 17	
A. G. Robinson		9 07	
A. J. Russell		99 19	
W. H. Rexford		67	
H. J. Reilly		13 57	
Geo. F. Robinson		6,137 72	
F. W. Roe		203 49	
Carried forward		83,795 76	1,490,089 88

1883-'84. MILITARY ESTABLISHMENT.

Clothing and camp and garrison equipage, 1884—Continued.

Deduct repayments:			
Brought forward		$83,795 76	$1,490,089 88
By P. H. Ray	16 77		
Jas Reagan	260 94		
B. Reynolds	358 03		
W. F. Rice	171 46		
H. E. Robinson	75 38		
J. R. Roche	355 65		
W. A. Rucker	1,348 90		
W. W. Robinson	184 62		
H. D. Reed	49 19		
F. S. Rice	9 76		
J. W. Scully	31 20		
G. L. Scott	16 71		
S. Smith	66 21		
C. Smith	103 17		
W. Smith	3,454 63		
E. Smith	2,070 73		
G. C. Smith	33 61		
W. H. Smith	2,331 94		
G. R. Smith	1,890 93		
Jno. Simpson	41 53		
J. F. Simpson	19 91		
Jno. Stafford	27 99		
A. C. Sharpe	40 60		
Alex. Sharpe	2,674 68		
J. A. Swift	16 94		
T. H. Stanton	4,579 52		
D. F. Stiles	70 60		
G. H. Sands	170 14		
C. C. Sniffin	5,901 04		
J. W. Summerhayes	42 32		
S. E. Sparrow	27 43		
C. J. Sprague	1,569 25		
C. H. Tompkins	8 20		
F. Thorpe	15 12		
W. F. Tucker	3,489 75		
C. P. Terrett	99 43		
A. H. Taylor	20 76		
J. T. Thompson	19 36		
H. G. Thomas	1,471 42		
A. S. Towar	5,887 49		
C. M. Terrell	129 16		
A. H. M. Taylor	140 23		
W. W. Tyler	3 04		
S. C. Vedder	568 71		
C. B. Vodges	52 13		
W. M. Williams	24 51		
G. H. Weeks	1 68		
D. D. Wheeler	10 46		
C. H. Whipple	8,779 94		
J. L. Wilson	22 34		
C. W. Williams	50 50		
C. A. Williams	19 37		
J. H. Waters	356 56		
H. D. H. Waite	122 32		
G. N. Whistler	67 21		
I. T. Webster	4 79		
R. H. Wilson	122 01		
J. V. White	2 57		
M. C. Wessels	136 50		
W. W. Wotherspoon	43 92		
J. P. Willard	799 37		
C. I. Wilson	1,360 78		
W. Wittich	62 94		
J. McA. Webster	77 41		
J. W. Whane	596 58		
P. G. Wood	23 21		
B. C. Welsh	27 58		
J. S. Witcher	286 08		
D. J. Young	18 05		
R. T. Yeatman	42 84		
		136,771 86	
		1,353,318 02	

National cemeteries, 1882:

By R. N. Batchelder	$1 96	
F. H. Edmunds	05	
	2 01	

National cemeteries, 1883:

To R. N. Batchelder		$3,845 29
Deming Fitch		7 50
M. A. McGowan		50 00
F. T. Miller		768 00
A. Wiegand		10 00
		4,680 79
Deduct repayments:		
By E. B. Atwood	$1,386 07	
J. H. Belcher	1,100 68	
J. J. Brereton	15 00	
J. A. Ekin	52	
H. C. Hodges	16 94	
D. K. Kelton	53	
O. E. Michaelis	118 29	
Jno. Pitman	1 82	
C. A. Reynolds	49 37	
C. G. Sawtelle	20 00	
C. H. Tompkins	2 25	
		2,711 47
		1,969 32

National cemeteries, 1884:

To E. B. Grimes, captain	109 50
R. N. Batchelder, colonel	37,628 33
J. D. Bingham, colonel	4,940 50
G. B. Dandy, major	362 00
J. A. Ekin, colonel	1,779 37
C. W. Foster, major	4,214 83
Jas. Gilliss, major	5,508 82
H. C. Hodges, colonel	100 00
W. B. Hughes, major	1,249 91
A. S. Kimball, captain	228,56
J. G. C. Lee, major	1,472 00
M. I. Ludington, colonel	353 47
J. M. Moore, colonel	900 00
H. B. Osgood, lieutenant	1,466 25
A. J. Perry, colonel	210 00
C. A. Reynolds, major	17,327 29
C. G. Sawtelle, colonel	290 00
E. J. Strang, captain	2,901 00
R. Saxton, colonel	3,316 33
J. W. Scully, major	1,358 49
G. C. Smith, captain	1,000 00
C. H. Tompkins, colonel	7 50
D. D. Wheeler, captain	1,539 83
G. H. Weeks, captain	234 00
	88,497 98
Deduct repayment:	
By H. B. Osgood	420 00
	88,077 98

Pay of superintendents of national cemeteries, 1883:

By C. A. Reynolds	$61 20

Pay of superintendents of national cemeteries, 1884:

To E. B. Atwood, captain	690 00
R. N. Batchelder, colonel	4,160 00
J. D. Bingham, colonel	2,200 00
L. E. Campbell, captain	276 50
G. B. Dandy, major	1,500 00
J. A. Ekin, colonel	1,090 00
C. W. Foster, major	6,586 50
Jas. Gilliss, major	7,158 00
W. B. Hughes, major	2,560 00
J. G. C. Lee, colonel	1,560 00
H. B. Osgood, lieutenant	2,273 00
A. J. Perry, colonel	420 00
C. A. Reynolds, major	13,920 00
C. G. Sawtelle, colonel	300 00
E. J. Strang, captain	1,460 00
R. Saxton, colonel	5,450 00
J. W. Scully, major	3,200 00
C. H. Tompkins, colonel	365 00
N. Ward	30 00
D. D. Wheeler, captain	4,745 00
	59,944 00

Headstones for graves in private cemeteries:		
To R. N. Batchelder, colonel		$25,000 00
Chicago and Grand Trunk R. R		24 36
D. L. Kent		5,331 78
		30,356 14
Road from Chattanooga, Tenn., to the national cemetery:		
To R. N. Batchelder, colonel		2,500 00
Road from Mound City, Ill., to the national cemetery:		
To R. N. Batchelder, colonel		5,000 00
Road from Fort Scott, Kans., to the national cemetery:		
By R. N. Batchelder, colonel	$23 70	
Medical and hospital department, 1881 and prior years (transfer account):		
To C. M. Wilcox		100 00
Deduct repayments:		
By L. Clarke	$6 00	
G. Phelan	6 00	
J. L. Styron	1 50	
		13 50
		86 50
Medical and hospital department, 1881 and prior years:		
By E. D. Rose	$27 50	
J. O. Skinner	192 55	
		220 05
Medical and hospital department, 1882:		
To C. H. Butler		2 05
L. A. Craig		11 70
W. I. Sanborn		4 00
W. M. Waterbury		18 40
G. M. Wheeler		87 54
		123 69
Medical and hospital department, 1883:		
To C. C. Arms		12 00
F. T. Anderson		25 00
A. Atkinson		14 10
C. H. Butler		5 95
J. N. Butt		11 50
T. T. Beall		16 50
J. H. Blue		8 25
E. Bennett		63 00
A. M. Brown		20 00
L. Balch		18 00
G. E. Brickett		402 90
J. B. Burbank		70 00
F. H. Caldwell		9 20
J. D. Carnahan		72 00
E. Campbell		6 50
J. M. Crawford		19 00
N. B. Carson		32 45
J. E. Cohn		53 00
C. C. P. Clark		54 00
C. E. Davis		3 00
W. P. Duvall		9 25
W. W. Dawson		44 00
G. A. Drew		8 50
T. Eckles		35 00
N. K. Fairbank		48 00
W. M. Fay		16 00
D. O. Farrandder		2 00
Q. A. Gillmore		78 66
J. M. Goe		46 75
J. B. Hartwell		200 00
Carried forward		1,404 51

Medical and hospital department, 1883—Continued.		
Brought forward		$1,404 51
To F. Hassancamp		7 55
A. A. Higgins		5 50
M. W. Horine		55 00
W. B. Hughes		43 35
T. C. Hanson		10 50
J. W. Hingston		45 00
A. E. Hall		64 75
J. F. Heuistis		166 50
J. P. E. Heintz		65 00
H. S. Hirsey		4 00
W. R. King		5 00
J. J. Leiser		48 75
J. M. Love		2 75
G. E. Letourneau		53 00
I. C. Mueller		2 30
O. G. B. McMullan		52 50
H. McGowan		10 00
McNutt & Hurlbut		7 75
P. F. Madden		92 50
J. M. Miller		69 00
M. J. MacConnell		11 90
H. G. Miller		20 00
J. H. McClelland		46 00
H. G. Mamzey		10 00
W. L. Marshall		3 00
J. A. Milne		87 20
T. A. McParlin		318 23
H. R. Porter		59 50
R. Pollock		4 00
D. Parker		4 00
H. M. Paine		82 00
F. W. Prentice		109 00
J. F. Y. Paine		59 50
M. Pietzycki		14 25
G. P. Putnams		22 10
H. T. Reed		60 30
E. M. Rosenkrans		38 45
J. G. Richardson		17 55
L. F. Reynaud		15 15
P. G. Skillern		66 90
St. John's Hospital		11 42
A. R. Sherman		23 00
J. H. Scarff		10 00
E. Spangenberg		8 00
C. S. Shaw		5 35
St. Clair Street		2 00
J. L. Stewart		32 00
E. Swift		4,000 00
A. P. Smith		18 00
D. Scott		5 40
W. M. Van Horne		6 00
A. Vander Veen		17 00
H. C. Wood		36 00
G. M. Wheeler		39 38
S. B. Ward		36 20
B. B. Wilson		151 00
		7,664 99
Deduct repayments:		
By Atlantic and Pacific R. R	$2 50	
J. J. Skinner	4 00	
War Department	2,318 14	
		2,324 64
		5,340 35
Medical and hospital department, 1884:		
To F. T. Anderson		94 10
C. C. Arms		20 00
A. S. Adler		10 00
T. Artand		13 55
G. T. Beall		35,000 00
L. Balch		36 00
J. M. Bell		11 75
A. L. Breysacker		50 00
W. L. Buck		9 00
T. G. Baylor		20 44
F. B. Bishop		43 70
Paul R. Brown		22 75
Carried forward		35,331 29

1883–'84. MILITARY ESTABLISHMENT.

Medical and hospital department.
1884—Continued.

Brought forward		$35,331 29
To G. E. Breckett		163 00
J. H. Belcher		84 65
N. B. Carson		143 85
Thos. Chess		69 26
W. G. Curtis		13 00
F. M. Denny		30 00
D. F. Etter		13 00
R. C. Eve		10 00
Jno. Fee		50 00
R. J. H. Fall		3 00
J. D. Griffith		16 00
H. A. Given		8 00
J. T. Ghiselin		55 00
T. C. Hanson		14 35
W. B. Hughes		2 95
H. Hamilton		18 45
D. C. Houston		48 00
C. W. Hickman		26 00
R. S. Ives		74 00
H. W. Jones		4 00
Sister Joanna		10 00
H. M. Jones		3 00
W. R. King		32 00
J. H. Klock		22 10
J. M. Love		9 95
J. J. Leiser		11 00
D. W. Lockwood		13 00
F. Leopold		125 00
T. A. McParlin, colonel		115,000 00
E. N. Mayo		5 60
J. W. McFarlane		114 50
Milburn & Williamson		16 05
W. C. Morris		15 00
W. L. Marshall		43 00
J. F. McKinstry		5 00
W. Mills		7 30
T. E. Mitchell		20 00
H. McGowan		15 00
Jno. Moore		5,000 00
E. L. Morgan		62 00
G. M. Mason		60 00
W. C. Morris		45 00
A. R. McGowan		15 00
J. A. Milne		10 00
P. F. Madden		60 00
F. L. Moyne		14 50
F. S. Newcomer		482 50
D. O'Donoghue		18 85
D. C. Poole		10 25
A. Pohl		120 00
E. S. Riggs		10 00
C. J. Rosenham		4 05
E. Swift, colonel		10,000 00
C. Stoner		27 15
St. Clair Street		14 00
J. O. Skinner		17,000 00
P. G. Skellern		118 05
G. H. Stone		60 00
J. L. Stewart		15 50
E. Smith		15 00
C. S. Shaw		16 35
G. P. Sampson		15 00
S. M. Tyler		8 00
E. F. Waiker		13 00
P. M. Wood		14 05
W. L. Wheeler		95 00
B. B. Wilson		313 00
War Department		21 48
		185,303 03
Deduct repayments:		
By E. B. Atwood	$60 00	
G. T. Beale	21 48	
C. E. Goddard	13 00	
J. B. W. Gardiner	10 76	
J. L. Ord	52 10	
H. I. Raymond	4 00	
War Department	10,438 30	
		10,599 64
		174,703 39

Medical Museum and Library, 1884:

To J. O. Skinner		$9,980 00
Treasury Department		20 00
		10,000 00

Artificial limbs, 1881:

By J. O. Skinner	$1,804 73	

Artificial limbs, 1882:

By J. O. Skinner	2,511 80	

Artificial limbs, 1883:

By J. O. Skinner	4,772 06	

Artificial limbs, 1884:

To Central Pacific R. R		58 90
E. B. Grimes		2 48
A. S. Kimball		57 80
J. O. Skinner		190,000 00
J. W. Thompson		75 00
Union Pacific R. R		177 17
War Department		1,170 79
		191,542 14

Appliances for disabled soldiers, 1882:

By J. O. Skinner	$644 00	

Appliances for disabled soldiers, 1883:

By J. O. Skinner	$173 75	

Appliances for disabled soldiers, 1884:

To J. O. Skinner		1,000 00
C. H. Seaman		16 00
		1,016 00

Construction and repair of hospitals, 1881 and prior years:

By J. W. Bean	$19 25	
J. S. Marsteller	501 14	
W. W. Wotherspoon	9 50	
F. C. Woodbury	3 00	
	532 89	

Construction and repair of hospitals, 1882:

To J. S. Marsteller		501 14
Deduct repayments:		
By C. F. Humphrey	$155 95	
John Simpson	70	
		156 65
		344 49

Construction and repair of hospitals, 1883:

By J. D. Bingham	$35 27	
J. J. Dana	20	
E. Griffin	8 50	
H. C. Hodges	3 02	
F. H. Hathaway	81	
J. W. Jacobs	82 20	
D. H. Kelton	1 08	
J. G. C. Lee	3 33	
C. P. Miller	07	
J. M. Moore	577 25	
C. G. Sawtelle	97 46	
G. H. Weeks	52 75	
	861 94	

Construction and repair of hospitals, 1884:

To J. D. Bingham		28,020 35
J. H. Belcher		750 50
C. A. Booth		780 10
G. H. Cook		177 79
J. J. Dana		6,967 07
G. B. Dandy		7,489 13
Jas. Gilliss		375 00
Carried forward		44,559 94

Construction and repairs of hospitals, 1884—Continued.		
Brought forward		$44,559 94
To C. H. Hoyt		311 55
A. S. Kimball		11,830 00
J. L. Lusk		205 10
J. G. C. Lee		4,379 39
O. E. Michaelis		4,000 00
A. J. McGonnigle		3,526 14
J. M. Moore		7,458 23
A. E. Miltimore		956 71
A. J. Perry		786 40
C. G. Sawtelle		12,090 38
G. H. Weeks		9,888 64
		99,992 48
Testing-machine, 1883:		
By J. Pitman	$3 89	
Testing-machine, 1884:		
To Frank Baker, lieutenant		40 00
Jno. Pitman, captain		9,960 00
		10,000 00
Torpedoes for harbor defense, 1884:		
To H. L. Abbot, colonel		75,000 00
E. H. Ruffner, captain		20,000 00
		95,000 00
Deduct repayments:		
By H. L. Abbot		20,000 00
		75,000 00
Ordnance service, 1882:		
To M. W. Lyon		81
Deduct from repayments:		
By J. A. Kress	$0 60	
M. W. Lyon	81	
		1 41
Excess of repayments		60
Ordnance service, 1883:		
To J. McNally, captain		971 43
W. S. Starring, captain		9,977 94
		10,949 37
Deduct repayments:		
By S. Crispin	$0 08	
M. J. Grealish	5 92	
M. W. Lyon	227 50	
J. R. McGinniss	53	
V. McNally	28	
		234 31
		10,715 06
Ordnance service, 1884:		
To J. Arnold, major		6,000 00
J. G. Butler, captain		10,000 00
C. Bryant, captain		1,280 00
S. E. Blunt, captain		1,100 00
L. S. Babbitt, major		4,485 00
Frank Baker, captain		3,500 00
S. Crispin, colonel		4,667 70
J. P. Farley, captain		1,000 00
M. J. Grealish, captain		3,500 00
F. Heath, captain		665 00
M. W. Lyon, lieutenant		2,740 00
A. S. M. Morgan, captain		3,500 00
J. McAllister, colonel		12,738 17
V. McNally, captain		8,989 48
J. R. McGinniss, major		4,200 00
I. MacNutt, lieutenant		2,500 00
O. B. Mitcham, lieutenant		749 00
Jno. Pitman, captain		8,975 00
F. H. Phipps, major		2,000 00
W. H. Rexford, captain		3,500 00
J. Rockwell, captain		1,225 00
G. B. Russell, captain		2,000 00
Carried forward		89,314 35

Ordnance service, 1884—Continued.		
Brought forward		$89,314 35
To W. S. Starring, captain		11,491 97
D. J. Young, captain		7,014 00
		107,820 32
Deduct repayments:		
By F. Baker	$360 40	
J. McAllister	780 00	
		1,140 40
		106,679 92
Ordnance, ordnance stores, and supplies, 1882:		
By M. W. Lyon	$4 06	
D. J. Young	50	
		4 56
Ordnance, ordnance stores, and supplies, 1883:		
By S. E. Blunt	$27 14	
C. Bryant	111 58	
M. W. Lyon	09	
J. R. McGinniss	13	
V. McNally	39 33	
		178 27
Ordnance, ordnance stores, and supplies, 1884:		
To I. Arnold, major		7,808 38
J. C. Ayers, captain		5,932 97
J. G. Butler, captain		100,675 65
C. Bryant, captain		248 00
S. E. Blunt, captain		1,788 25
L. S. Babbitt, major		939 50
F. Baker, captain		8,912 04
M. J. Grealish, captain		533 80
Q. A. Gillmore, colonel		420 00
J. E. Greer, lieutenant		123 50
Frank Heath, captain		411 60
M. W. Lyon, lieutenant		66,170 00
A. S. M. Morgan, captain		500 00
J. McAllister, colonel		38,941 83
V. McNally, captain		3,675 00
J. R. McGinniss, major		1,100 00
I. MacNutt, lieutenant		60,443 50
O. B. Mitcham, lieutenant		314 89
Jno. Pitman, captain		5,489 80
S. H. Phipps, major		150 00
W. H. Rexford, captain		500 00
J. Rockwell, captain		4,294 80
G. B. Russell, captain		3,565 43
W. S. Starring, captain		12,427 62
O. B. Williams, lieutenant		225 41
D. J. Young, captain		74,408 08
		400,000 00
Powder and projectiles, proceeds of sales:		
To F. Baker, captain		8,300 00
M. W. Lyon, captain		11,200 00
V. McNally, captain		12,460 05
I. MacNutt, captain		2,450 00
J. McAllister, colonel		4,927 95
W. S. Starring, captain		3,470 00
		42,808 00
Ordnance material, proceeds of sales:		
To F. Baker, captain		7 00
V. McNally, captain		68,806 45
Jno. Pitman, captain		5,825 00
W. S. Starring, captain		361 55
		75,000 00
Manufacture or purchase of magazine guns:		
To J. C. Ayers, captain		30,250 00

Sea-coast batteries for instruction of militia:		
By Jno. Pitman.....	$477 20	
Purchase of arms for volunteers and regulars, 1871 and prior years (transfer account):		
By J. G. Ramsey.....	$2 65	
Manufacture of arms at national armories, 1884:		
To J. C. Ayers, captain.....		$401,000 00
Arming and equipping the militia (transfer account):		
By Central Pacific R.R.	$93 64	
Union Pacific R.R..	18 66	
	112 30	
Arming and equipping the militia:		
To J. C. Ayers, captain.....		44,664 59
J. G. Butler, captain.....		4,426 00
Frank Baker, lieutenant.....		62,811 58
L. S. Babbitt, major.....		2 40
M. A. Eagan.....		165 36
J. T. Kirkman, lieutenant....		7 66
M. W. Lyon, lieutenant.....		535 00
J. V. Meigs.....		9,639 00
V. McNally, captain.....		43,982 39
I. MacNutt, lieutenant.....		40 00
A. S. M. Morgan, captain.....		78 00
G. B. Russell.....		100 00
D. J. Young, captain.....		20,201 36
		186,653 34
Deduct repayments:		
By W. Arthur.....	$34 42	
W. Adams.....	277 54	
J. C. Ayers.....	429 46	
Adelbert College, Ohio.....	18 28	
I. Arnold.....	87 15	
W. H. Beck.....	75	
A. H. Budlong.....	43 10	
D. N. Bash.....	378 46	
J. P. Baker.....	183 34	
G. W. Baird.....	75 76	
J. E. Blaine.....	135 91	
C. Bryant.....	132 78	
S E. Blunt.....	88 29	
C. Bentzoni.....	13 00	
J. G. Butler.....	249 82	
Jno. Baxter.....	12 24	
A. E. Bates.....	17 69	
K. Bates.....	14 00	
H. S. Bishop.....	1 90	
D. H. Boughton.....	6 25	
J. Y. F. Blake.....	12 00	
F. Baker.....	13 72	
J. P. Canby.....	109 50	
W. H. Comegys.....	182 47	
F. M. Coxe.....	6 35	
H. Clayton.....	503 05	
C. Chase.....	9 33	
F. H. Corrie.....	16 25	
J. M. Craig.....	60	
L. E. Campbell.....	212 46	
O. M. Carter.....	24 11	
W. E. Creary.....	137 97	
G. W. Candee.....	1 01	
Cornell College.....	68 84	
I. O. Dewey.....	8 94	
F. S. Dodge.....	127 53	
S. A. Dyer.....	13 76	
F. T. Davis.....	1 50	
E. D. Dimmick.....	80	
W. Davis.....	13 99	
C. L. Davis.....	34	
E. P. Ewers.....	13 50	
W. H. Eckels.....	211 77	
F. A. Edwards.....	5 50	
J. H. Edson.....	30 00	
Carried forward..	3,925 43	186,653 34

Arming and equipping the militia—Continued.		
Deduct repayments:		
Brought forward.	$3,925 43	$186,653 34
By D. W. Flagler.....	21 74	
C. Grover.....	22 96	
J. A. Goot.....	90	
W. R. Gibson.....	222 17	
W. Gerlach.....	5 37	
C. B. Gaterwood.....	13 00	
J. E. Greer.....	109 29	
G. E. Glenn.....	17	
E. A. Godwin.....	2 30	
Theo. Hyatt.....	1,682 37	
H. C. Hodges.....	6 24	
P. P. G. Hall.....	132 06	
F. Heath.....	48 30	
J. B. Hickey.....	13 50	
F. W. Hess.....	2 50	
G. Ilges.....	171 64	
C. H. Ingalls.....	2 31	
W. H. Johnston.....	23 36	
J. B. Keefer.....	3 78	
J. A. Kress.....	48 79	
J. T. Kirkman.....	15 32	
T. S. Kirtland.....	82 79	
D. R. Larned.....	68 14	
M. W. Lyon.....	9 00	
H. F. Leggett.....	13 75	
J. B. Lockwood.....	98	
J. C. Muhlenberg.....	206 83	
W. M. Maynadier.....	392 04	
C. B. McClellan.....	40	
J. MacNutt.....	10	
J. McAllister.....	141 27	
V. McNally.....	9,024 27	
D. McClure.....	9 45	
C. McClure.....	2 66	
O. B. Mitcham.....	64 81	
E. J. McClernand.....	3 34	
Michigan Military Academy.....	16 72	
Massachusetts Agricultural College	96 74	
M. Nolan.....	65 00	
N. Nolan.....	24 00	
S. T. Norvell.....	13 75	
D. C. Poole.....	73 33	
Jno. Pitman.....	7 03	
J. R. Pierce.....	6 00	
W. R. Price.....	32 94	
J. P. Parker.....	11 70	
J. Rockwell.....	134 92	
W. A. Rucker.....	157 47	
J. R. Roche.....	24 64	
G. F. Robinson.....	206 61	
Review Academy.....	2 98	
C. F. Robe.....	34 77	
E. J. Spencer.....	24 45	
C. J. Sprague.....	72 10	
T. H. Stanton.....	104 59	
W. H. Smith.....	568 61	
R. Smith.....	17 39	
C. C. Sniffin.....	158 00	
Alex. Sharpe.....	80 91	
W. Smith.....	18 14	
L. E. Sebree.....	13 00	
G. R. Smith.....	9 43	
C. L. Steele.....	8 45	
H. G. Thomas.....	245 33	
A. S. Towar.....	61 97	
H. Tucker, jr.....	21 55	
C. M. Terrell.....	21 67	
W. F. Tucker.....	673 26	
D. M. Taylor.....	110 24	
University of Nebraska.....	52 10	
C. D. Viele.....	28 02	
W. M. Van Horn.....	82 59	
J. R. Wasson.....	4 40	
J. W. Wham.....	14 57	
C. H. Whipple.....	337 17	
F. Woodbridge.....	19 08	
Carried forward..	20,148 95	186,653 34

Arming and equipping the militia—Continued.

Deduct repayments:		
Brought forward	$20,148 95	$186,653 34
By J. S. Witcher	10 14	
J. P. Willard	9 41	
W. Wittich	177 60	
C. I. Wilson	15 34	
G. S. Wilson	6 50	
W. M. Wallace	13 75	
War Department	16,196 59	
D. J. Young	6 80	
		36,585 08
		150,068 26

Powder Depot, Dover, N. J.:
To J. P. Farley, major 40,000 00

Repairs of arsenals, 1883:
By J. R. McGinniss $0 26

Repairs of arsenals, 1884:

To I. Arnold, major	100 00
L. S. Babbitt, major	1,125 00
F. Baker, lieutenant	2,000 00
M. J. Grealish, captain	2,000 00
J. A. Kress, captain	911 40
M. W. Lyon, lieutenant	3,000 00
A. S. M. Morgan, captain	3,000 00
J. McAllister, colonel	3,000 00
V. McNally, captain	375 00
J. R. McGinnis, major	750 00
F. H. Phipps, major	3,500 00
John Pitman, captain	4,000 00
W. H. Rexford, captain	2,000 00
G. B. Russell, captain	588 60
W. S. Starring, captain	9,067 00
D. J. Young, captain	4,583 00
	40,000 00

Frankford Arsenal, Philadelphia:
To M. W. Lyon, lieutenant 1,500 00

Springfield Arsenal, Mass., 1883:
By J. C. Ayers $91 68

Springfield Arsenal, Mass., 1884:
To J. C. Ayers, captain 15,000 00

Rock Island Arsenal, Ill.:
To J. G. Butler, captain 202,500 00

Rock Island Bridge, Ill.:
To J. G. Butler, captain 9,250 00

Benicia Arsenal, Cal.:
To J. McAllister, colonel 104,619 80

New York Arsenal, N. Y.:
To W. S. Starring, captain 5,500 00

Armament of fortifications, 1883:

To J. C. Ayers, captain	35,000 00
V. McNally, captain	13,809 95
	48,809 95
Deduct repayments:	
By M. W. Lyon	$319 94
V. McNally	131 17
	451 11
	48,358 84

Armament of fortifications, 1884:

To F. Baker, lieutenant	3,550 00
L. S. Babbitt, major	103 13
M. W. Lyon, lieutenant	825 00
V. McNally, captain	115,800 00
I. MacNutt, lieutenant	202 50
John Pitman, captain	75,000 00
W. S. Starring, captain	44,125 10
	239,605 73

Purchase of Sawyer's patent for canister shot:
To A. M. Sawyer $25,000 00

Current and ordinary expenses, U. S. Military Academy, 1882:
By C. H. Hoyt $2,183 69

Current and ordinary expenses, U. S. Military Academy, 1884:
To C. H. Hoyt, captain 47,505 00

Miscellaneous items and incidental expenses, U. S. Military Academy, 1883:
By C. H. Hoyt $113 71

Miscellaneous items and incidental expenses, U. S. Military Academy, 1884:
To C. H. Hoyt, captain 14,370 00

Buildings and grounds, U. S. Military Academy, 1883:
By C. H. Hoyt $5 76

Buildings and grounds, U. S. Military Academy, 1884:
To C. H. Hoyt, captain 29,350 00

Buildings and grounds, U. S. Military Academy, 1884 and 1885:
To C. H. Hoyt, captain 1,010 00

Fort Jackson, Mississippi River, La.:
To A. Stickney, major 2,527 50

Preservation and repairs of fortifications, 1883:

To Q. A. Gillmore	1,030 00
G. L. Gillespie	4 52
C. S. Stewart	71
A. Stickney	5,926 21
	6,961 44
Deduct from repayments:	
By A. N. Damrell	$1,815 57
Q. A. Gillmore	4,891 00
P. C. Hains	62 23
H. M. Robert	875 72
	7,644 52
Excess of repayments	683 08

Preservation and repair of fortifications, 1884:

To H. L. Abbot, colonel	7,150 00
C. E. Blunt, colonel	1,650 00
W. P. Craighill, colonel	3,900 00
C. B. Comstock, colonel	1,600 00
T. L. Casey, colonel	1,500 00
A. N. Damrell, major	9,067 00
Jas. Evelith	11,000 00
G. H. Elliot, colonel	14,280 00
G. L. Gillespie, major	10,200 00
Q. A. Gillmore, colonel	36,143 00
P. C. Hains, major	690 00
W. H. Heuer, captain	6,338 27
F. A. Hinman, major	2,620 00
J. Mercur, captain	4,900 00
W. McFarland, major	1,700 00
G. H. Mendell, colonel	1,900 00
J. Newton, colonel	3,500 00
C. F. Powell, captain	6,707 00
C. W. Raymond, major	15,125 00
E. H. Ruffner, captain	3,200 00
H. M. Robert, colonel	11,565 00
C. S. Stewart, colonel	855 00
C. Seaforth, colonel	2,215 00
A. Stickney, major	10,000 00
Thomas Turtle	693 50
G. Weitzel, colonel	2,800 00
Carried forward	171,298 77

Preservation and repair of fortifications, 1884—Continued.		
Brought forward		$171,298 77
Deduct repayments:		
By H. L. Abbot	$1,500 00	
O. M. Poe	127 69	
G. Weitzel	974 77	
		2,602 46
		168,696 31
Engineer depot at Willets Point, N. Y., 1884:		
To H. L. Abbot, colonel		7,000 00
E. H. Ruffner, captain		7,000 00
		14,000 00
Deduct repayment:		
By H. L. Abbot		7,000 00
		7,000 00
Improving harbor at Belfast, Me.:		
To C. E. Blunt, colonel		200 00
Improving harbor at Portland, Me.:		
To C. E. Blunt, colonel		10,000 00
Improving harbor at Portsmouth, N. H.:		
To C. E. Blunt, colonel		5,000 00
Improving harbor at Burlington, Vt.:		
To H. M. Robert, colonel		3,000 00
Improving harbor at Hyannis, Mass.:		
To G. H. Elliot, colonel		17 81
Improving harbor at Boston, Mass.;		
To J. G. Bennett		79 20
C. W. Raymond, major		66,037 50
		66,116 70
Improving harbor at Nantucket, Mass.:		
To G. H. Elliot, colonel		20,172 10
Improving harbor at Newburyport, Mass.:		
To C. W. Raymond, major		35,000 00
Improving harbor at Lynn, Mass.:		
To C. W. Raymond, major		3,181 12
Improving harbor at Provincetown, Mass.:		
To G. H. Elliot, colonel		22 93
Improving harbor at Plymouth, Mass.:		
To C. W. Raymond, major		956 71
Improving harbor at Scituate, Mass.:		
To G. H. Elliot, colonel		108 00
C. W. Raymond, major		1,564 28
		1,672 28
Improving harbor at Wareham, Mass.:		
To G. H. Elliot, colonel		2,379 32
Improving harbor of refuge at Wood's Holl, Mass.:		
To G. H Elliot, colonel		40,000 00
Improving harbor at Newport, R. I.:		
To G. H. Elliot, colonel		14,305 50
Improving harbor at Block Island, R. I.:		
To J. G. Bennett		$163 20
Deduct repayment:		
By G. H. Elliot		163 20
Improving harbor at New Haven, Conn.:		
To W. McFarland, major		15,000 00
Improving breakwater at New Haven, Conn.:		
To W. McFarland, major		35,000 00
Improving harbor at Buffalo, N. Y.:		
To E. Maguire, captain		45,000 00
H. M. Robert, colonel		20,000 00
		65,000 00
Improving channel in Gowanus Bay, N. Y.:		
To J. Newton, colonel		20,000 00
Improving harbor at Port Chester, N. Y.:		
To J. Mercur, captain		1,500 00
J. Newton, colonel		100 00
		1,600 00
Improving harbor at Charlotte, N. Y.:		
To H. M. Robert, colonel		30,000 00
Improving harbor at Greenport, N. Y.:		
To W. McFarland, major		5,000 00
Improving harbor at Great Sodus Bay, N. Y.:		
To H. M. Robert, colonel		17,000 00
Improving harbor at Little Sodus Bay, N. Y.:		
To H. M. Robert, colonel		17,000 00
Improving harbor at Mamaroneck, N. Y.:		
To W. McFarland, major		14,000 00
Improving harbor at Ogdensburg, N. Y.:		
To H. M. Robert, colonel		8,000 00
Improving harbor at Oswego, N. Y:		
To J. G. Bennett		158 40
H. M. Robert, colonel		40,000 00
		40,158 40
Improving harbor at Pultneyville, N. Y.:		
To H. M. Robert, colonel		3,000 00
Improving harbor at Sheepshead Bay, N. Y.:		
To G. L. Gillespie, major		9,000 00
Improving Sackett's Harbor, N. Y.:		
To H. M. Robert, colonel		5,969 50
Improving harbor at Wilson, N. Y.:		
To H. M. Robert, colonel		8,000 00
Improving harbor at Plattsburg, N. Y.:		
To J. G. Bennett		115 20
Deduct repayment:		
By G. H. Elliot		115 20
Improving harbor at Erie, Pa.:		
To M. B. Adams, captain		3,500 00

Improving ice-harbor at Marcus Hook, Pa.:
To G. Weitzel, colonel $24,290 18
Deduct repayment:
By G. Weitzel 6,290 18
18,000 00

Improving harbor at Keyport, N.J.:
To G. L. Gillespie, major 30,141 45

Improving harbor at Raritan Bay, N. J.:
To G. L. Gillespie, major 40,000 00

Removing obstructions from harbor at Delaware Breakwater, Del.:
To T. L. Casey, lieutenant 1,975 24
W. H. Heuer, captain 3,000 00
4,975 24
Deduct repayment:
By G. Weitzel 4,975 24

Improving harbor at Delaware Breakwater, Del.:
To T. L. Casey, lieutenant 20,000 00
W. H. Heuer, captain 22,974 12
G. Weitzel, colonel 60,000 00
102,974 12
Deduct repayment:
By G. Weitzel 12,974 12
90,000 00

Constructing pier in Delaware Bay, near Lewes, Del.:
To G. Weitzel, colonel 6,154 38
Deduct repayment:
By G. Weitzel 2,154 38
4,000 00

Improving ice-harbor at Reedy Island, Del.:
To T. L. Casey, lieutenant 705 82
G. Weitzel, colonel 500 00
1,205 82
Deduct repayment:
By G. Weitzel 705 82
500 00

Improving harbor at Wilmington, Del.:
To G. Weitzel, colonel 28,752 61
Deduct repayment:
By G. Weitzel 2,752 61
26,000 00

Improving harbor at Baltimore, Md.:
To W. P. Craighill, colonel 295,000 00

Improving harbor at Cambridge, Md.:
To W. P. Craighill, colonel 187 70

Improving harbor at Cambridge and Pocomoke River, Md.:
To W. P. Craighill, colonel 2,500 00

Improving harbor at Norfolk, Va.:
To James Mercur, captain 40,000 00
Deduct repayment:
By War Department 65 17
39,934 83

Improving harbor at Charleston, S. C.:
To J. G. Bennett $24 00
Q. A. Gillmore, colonel 102,043 03
102,067 03
Deduct repayment:
By Q. A. Gillmore 24 00
102,043 03

Improving harbor at Savannah, Ga.:
To Q. A. Gillmore, colonel 79,521 88

Improving harbor at Key West, Fla.:
To A. N. Damrell, major 25,000 00

Improving harbor at Pensacola, Fla.:
To A. N. Damrell, major 65,000 00

Improving harbor at Mobile, Ala.:
To A. N. Damrell, major 85,000 00

Improving harbor at New Orleans, La.:
To C. B. Sears, captain 28,000 00
A. Stickney, major 30,000 00
58 000 00
Deduct repayment:
By A. Stickney 12,826 25
45,173 75

Improving harbor at Brazos Santiago, Cal:
To W. L. Fisk, lieutenant 30,000 00
S. M. Mansfield, major 30,000 00
60,000 00

Improving harbor at Galveston, Tex.:
To S. M. Mansfield, major 41,000 00

Improving harbor at Ashtabula, Ohio:
To M. B. Adams, captain 6,600 00
E. Maguire, captain 8,400 00
15,000 00

Improving harbor at Cleveland, Ohio:
To L. C. Overman, major 212,000 00

Improving harbor of refuge near Cincinnati, Ohio:
To W. E. Merrill, colonel 400 00

Improving harbor at Black River, Ohio:
To L. C. Overman, major 5,000 00

Improving harbor at Fairport, Ohio:
To L. C. Overman, major 2,200 00

Improving harbor at Toledo, Ohio:
To L. C. Overman, major 17,000 00

Improving harbor at Vermillion, Ohio:
To L. C. Overman, major 2,000 00

Improving harbor at Michigan City, Ind.:
To J. A. Smith, major 18,000 00

Improving harbor at Chicago, Ill.:
To W. H. H. Benyaurd 75,000 00

Improving harbor at Calumet, Ill.:
To W. H. H. Benyaurd, major 10,000 00

Improving harbor at Waukegan, Ill.:
To D. C. Houston, colonel..... $5,000 00

Improving harbor at Cheboygan, Mich.:
To D. W. Lockwood, captain..... 121 02
Deduct repayment:
By F. U. Farquhar..... 121 02

Improving harbor at Au Sable, Mich.:
By F. U. Farquhar..... $2,900 55

Improving harbor at mouth of Cedar River, Mich.:
To F. A. Hinman 14,000 00

Improving harbor at Charlevoix, Mich.:
To D. W. Lockwood, captain 1,000 00

Improving harbor at Frankfort, Mich.:
To D. W. Lockwood, captain..... 2,000 00

Improving harbor at Grand Haven, Mich.:
To D. W. Lockwood, captain..... 10,000 00
Deduct repayment:
By War Department..... 1,845 20
8,154 80

Improving harbor at Ludington, Mich.:
To D. W. Lockwood, captain..... 3,000 00

Improving harbor at Manistee, Mich.:
To D. W. Lockwood, captain..... 2,000 00

Improving harbor of refuge, Lake Huron, Mich.:
To D. W. Lockwood, major 30,000 00
O. M. Poe, colonel 21,381 58
51,381 58
Deduct repayment:
By F. U. Farquhar..... 11,381 58
40,000 00

Improving harbor at Marquette, Mich.:
To F. A. Hinman, captain..... 3,000 00

Improving harbor at Muskegon, Mich.:
To D. L. Lockwood, captain..... 5,000 00

Improving harbor at New Buffalo, Mich.:
To J. A. Smith, major..... 5,000 00

Improving harbor at Ontonagon, Mich.:
To F. A. Hinman, captain..... 15,000 00

Improving harbor at Pentwater, Mich.:
To D. W. Lockwood, captain..... 3,000 00

Improving Portage Lake, harbor of refuge, Mich.:
To D. W. Lockwood, captain..... 10,000 00

Improving harbor of refuge, Grand Marias, Mich.:
To F. A. Hinman, Captain 57,500 00

Improving harbor at Saugatuck, Mich:
To D. W. Lockwood, captain..... 6,000 00

Improving harbor at South Haven, Mich.:
To D. W. Lockwood, captain..... $3,000 00

Improving harbor at Thunder Bay, Mich.:
To D. W. Lockwood, captain..... 5,000 00
O. M. Poe, colonel 5,000 00
10,000 00
Deduct repayment:
By F. U. Farquhar 3,144 78
6,855 22

Improving harbor at White River, Mich.:
To D. W. Lockwood, captain..... 4,000 00

Improving ice harbor of refuge at Belle River, Mich.:
To D. W. Lockwood, captain 120 76
Deduct repayment:
By F. U. Farquhar..... 120 76

Improving harbor at Green Bay, Wis.:
To J. W. Barlow, major..... 4,000 00
F. A. Hinman, captain..... 9,000 00
13,000 00

Improving harbor at Kewaunee, Wis.:
To F. A. Hinman, captain..... 7,000 00

Improving harbor at Manitowoc, Wis.:
To F. A. Hinman, captain..... 1,000 00

Improving harbor at Menomonee, Wis.:
To F. A. Hinman, captain 13,000 00

Improving harbor at Oconto, Wis.:
To J. W. Barlow, major..... 2,000 00
F. A. Hinman, captain..... 5,000 00
17,000 00

Improving harbor at Pensaukee, Wis.:
To F. A. Hinman, captain 9,000 00

Improving harbor at Port Washington, Wis.:
To F. A. Hinman, captain..... 1,000 00

Improving harbor of refuge Milwaukee Bay, Wis.:
To D. C. Houston, colonel..... 50,000 00

Improving harbor at Racine, Wis.:
To D. C. Houston, colonel 6,000 00

Improving harbor at Sheboygan, Wis.:
To F. A. Hinman, captain..... 22,000 00

Improving harbor at Two Rivers, Wis.:
To J. W. Barlow, major..... 4,000 00
F. A. Hinman, captain 4,000 00
8,000 00

Dredging Superior Bay, Wis.:
To C. J. Allen, major..... 20,000 00

Improving harbor of refuge at entrance of Sturgeon Bay Canal, Wis.:
To F. A. Hinman, captain..... 10,000 00

Improving harbor at Muscatine, Iowa:
To A. Mackenzie, major $2,500 00

Improving harbor at Grand Marais, Minn.:
To C. J. Allen, major 18,000 00

Improving harbor at Duluth, Minn.:
To C. J. Allen, major 15,000 00

Improving harbor at Oakland, Cal.:
To G. H. Mendell, colonel 145,000 00

Improving Humboldt Harbor and Bay, Cal.:
To G. H. Mendell, colonel 15,000 00

Improving harbor at Wilmington, Cal.:
To G. H. Mendell, colonel 30,000 00

Improving harbor at Yaquina Bay, Oreg.:
To C. F. Powell, captain 16,000 00

Improving Royal River, Me.:
To C. E. Blunt, colonel 4,949 40

Improving Lubec Channel, Me.:
To C. E. Blunt, colonel 5,000 00

Improving Moosabec Bar at Jonesport, Me.:
To C. E. Blunt, colonel 5,000 00

Improving Cocheco River, N. H.:
To C. E. Blunt, colonel 18,000 00

Improving Malden River, Mass.:
To C. W. Raymond, major 4,000 00

Improving Merrimac River, Mass.:
To C. W. Raymond, major 2,000 00

Improving Taunton River, Mass.:
To J. G. Bennett 144 00
Deduct repayment:
By G. H. Elliot 144 00

Improving Providence River and Narragansett Bay, R. I.:
To J. G. Bennett 88 80
G. H. Elliot 107,026 25
107,115 05
Deduct repayment:
By G. H. Elliot 88 80
107,026 25

Improving Pawtucket River, R. I.:
To J. G. Bennett 88 80

Improving Connecticut River, Conn.:
To J. G. Bennett 31 20
W. McFarland, major 28,274 77
28,315 97

Improving Thames River, Conn.:
To W. McFarland, major 20,000 00

Removing obstructions in East River and Hell Gate, N. Y.:
To John Newton, colonel 22,000 00

Improving Hudson River, N. Y.:
To John Newton, colonel 37,000 00

Improving Newtown Creek, N. Y.:
To G. L. Gillespie, major 5,000 00

Improving Niagara River, N. Y.:
To E. Maguire, captain $1,000 00

Improving Buttermilk Channel, N. Y.:
To John Newton, colonel 50,000 00

Improving East Chester Creek, N. Y.:
To G. L. Gillespie, major 7,000 00

Sea-wall at Governor's Island, N. Y.:
To G. L. Gillespie, major 33,000 00

Improving Cohansey Creek, N. J.:
To T. L. Casey, lieutenant 515 67
Deduct repayment:
By G. Weitzel, colonel 515 67

Improving Cheesequakes Creek, N. J.:
To G. L. Gillespie, major 14,000 00

Improving Elizabeth River, N. J.:
To G. L. Gillespie, major 5,000 00

Improving Passaic River, N. J.:
To G. L. Gillespie, major 8,932 62

Improving Passaic River from Pennsylvania R. R. Bridge to mouth, N. J.:
To G. L. Gillespie, major 28,000 00

Improving Rahway River, N. J.:
To G. L. Gillespie, major 5,000 00

Improving Salem River, N. J.:
By G. Weitzel $1,490 66

Improving Raritan River, N. J.:
To John Newton, colonel 15,000 00

Improving Raccoon River, N. J.:
To G. Weitzel, colonel 7 23

Improving Shrewsbury River, N. J.:
To G. L. Gillespie, major 15,000 00

Improving Rancocas River, N. J.:
To T. L. Casey, lieutenant 471 00
Deduct repayment:
By G. Weitzel 471 00

Improving Woodbury Creek, N. J.:
By G. Weitzel, colonel $49 69

Improving Delaware River below Bridesburg, Pa.:
To T. L. Casey, lieutenant 7,445 89
W. H. Heuer, captain 7,000 00
G. Weitzel, colonel 77,000 00
91,445 89
Deduct repayment:
By G. Weitzel, ... 7,445 89
84,000 00

Improving Delaware River between Trenton, N. J., and Bridesburg, Pa.:
To T. L. Casey, lieutenant 232 77
Deduct repayment:
By G. Weitzel 232 77

Improving Delaware River at Schooner Ledge, Pa. and Del.:
To T. L. Casey, lieutenant 500 00
W. H. Heuer, captain 500 52
1,000 52
Deduct repayment:
By G. Weitzel 1,000 52

Improving Delaware River near Cherry Island Flats, Pa. and Del.:
To T. L. Casey, lieutenant..... $1,000 00
G. Weitzel, colonel..... 65,000 00
66,000 00
Deduct repayment:
By G. Weitzel..... 2,821 58
63,178 42

Improving Frankford Creek, Pa.:
To T. L. Casey, lieutenant..... 500 00
G. Weitzel, colonel..... 3,000 00
3,500 00
Deduct repayment:
By G. Weitzel..... 1,116 72
2,383 28

Improving North Branch of Susquehanna River, Pa.:
To T. L. Casey, lieutenant..... 226 48
G. Weitzel, colonel..... 5,000 00
5,226 48
Deduct repayment:
By G. Weitzel..... 226 48
5,000 00

Improving Schuylkill River, Pa.:
To T. L. Casey, lieutenant..... 1,500 00
G. Weitzel, colonel..... 35,000 00
36,500 00
Deduct repayment:
By G. Weitzel..... 4,412 87
32,087 13

Improving Broadkiln River, Del.:
By G. Weitzel..... $77 58

Improving Indian River, Del.:
To T. L. Casey, lieutenant..... 300 00
G. Weitzel, colonel..... 7,000 00
7,300 00
Deduct repayment:
By G. Weitzel..... 300 00
7,000 00

Improving Saint Jones River, Del.:
By G. Weitzel..... $382 10

Improving Corsica Creek, Md.:
To W. P. Craighill, colonel..... 5,000 00

Improving Elk River, Md.:
To W. P. Craighill, colonel..... 4,000 00

Improving Wicomico River, Md.:
To W. P. Craighill, colonel..... 1,000 00

Improving Potomac River, D. C.:
To P. C. Hains, major..... 283,000 00

Improving Blackwater River, Va.:
To J. Mercur, captain..... 1,500 00
War Department..... 9 64
1,509 64

Improving Appomattox River, Va.:
To W. P. Craighill, colonel..... 15,000 00

Improving Archer's Hope River, Va.:
To J. Mercur, captain..... 5,000 00

Improving James River, Va.:
To W. P. Craighill, colonel..... $55,000 00

Improving Nomini Creek, Va.:
To S. T. Abert, colonel..... 2,000 00

Improving North Landing River, Va. and N. C.:
To J. Mercur, captain..... 2,500 00

Improving New River, Va. and W. Va.:
To W. P. Craighill, colonel..... 1,000 00

Improving Staunton River, Va.:
To S. T. Abert, colonel..... 4,000 00

Improving Totusky River, Va.:
To S. T. Abert, colonel..... 1,500 00

Improving Pagan Creek, Va.:
To War Department..... 55 53

Improving Monongahela River, W. Va.:
To W. E. Merrill, colonel..... 11,000 00

Improving Monongahela River, W. Va. and. Pa.:
To W. E. Merrill, colonel..... 10,000 00

Improving Elk River, W. Va.:
To W. P. Craighill, colonel..... 2,000 00

Improving Shenandoah River, W. Va.:
To W. P. Craighill, colonel..... 500 00

Improving Guyandotte River, W. Va.:
To J. C. Post, captain..... 1,400 00

Improving Great Kanawha River, W. Va.:
To W. P. Craighill, colonel..... 50,000 00

Improving Little Kanawha River, W. Va.:
By J. W. Cuyler..... $2,131 39

Improving Cape Fear River from ocean to Wilmington, N. C.:
To W. P. Craighill, colonel..... 130,000 00

Improving Cape Fear River from Wilmington to Fayetteville, N. C.:
To J. Mercur, captain..... 13,500 00

Improving French Broad River, N. C.:
To S. T. Abert, colonel..... 2,000 00

Improving Meherin River, N. C.:
To J. Mercur, captain..... 5,000 00

Improving Neuse River, N. C.:
To J. Mercur, captain..... 11,000 00

Improving Pamlico and Tar Rivers, N. C.:
To J. Mercur, captain..... 5,000 00

Improving Roanoke River, N. C.:
To S. T. Abert, colonel..... 2,000 00

Improving Trent River, N. C.:
To J. Mercur, captain..... 5,000 00

Improving Yadkin River, N. C.:
To F. A. Hinman, captain..... 2,500 00
J. Mercur..... 6,000 00
8,500 00

Improving Santee River, S. C.:	
To F. A. Hinman, captain	$4,000 00
J. Mercur	21,000 00
	25,000 00
Improving Salkahatchie River, S.C.:	
To Q. A. Gillmore, colonel	5,000 00
Improving Wateree River, S. C.:	
To J. Mercur, captain	10,000 00
Improving Altamaha River, Ga.:	
To Q. A. Gillmore, colonel	14,000 00
Improving Chattahoochee River, Ga.:	
To A. N. Damrell, major	15,000 00
Improving Coosa River, Ga. and Ala.:	
To W. R. King, major	23,000 00
Improving Flint River, Ga.:	
To A. N. Damrell, major	5,000 00
Improving Ocmulgee River, Ga.:	
To W. R. King, major	1,000 00
Improving Oconee River, Ga.:	
To W. R. King, major	3,500 00
Improving Romley Marsh, Ga.:	
To Q. A. Gillmore, colonel	9,938 37
Improving Apalachicola River, Fla.:	
To A. N. Damrell, major	2,000 00
Improving Choctawhatchie River, Fla. and Ala.:	
To A. N. Damrell, major	2,000 00
Improving Caloosahatchee River, Fla.:	
To A. N. Damrell, major	5,000 00
Improving Escambia and Conecuh Rivers, Fla. and Ala.:	
To A. N. Damrell, major	6,000 00
Improving Peas Creek, Fla.:	
To A. N. Damrell, major	4,000 00
Improving Saint John's River, Fla.:	
To Q. A. Gillmore, colonel	65,000 00
Improving Alabama River, Ala.:	
To A. N. Damrell, major	10,000 00
Improving Cahaba River, Ala.:	
To A. N. Damrell, major	10,000 00
Improving Tallapoosa River, Ala.:	
To A. N. Damrell, major	15,000 00
Improving Old Town Creek, Miss.:	
To A. N. Damrell, major	3,000 00
Improving Pearl River, Miss.:	
To A. Stickney, major	6,000 00
Improving Pearl River below Jackson, Miss.:	
To A. Stickney, major	7,000 00
Improving Tombigbee River, Miss.:	
To A. N. Damrell, major	1,000 00
Improving Bayou Black, La.:	
To A. Stickney, major	10,500 00
Improving Calcasieu Pass, La.:	
To A. Stickney, major	200 00
Improving Calcasieu River, La.:	
To A. Stickney	$500 00
Improving Red River, La.:	
To A. M. Miller, major	40,000 00
Improving Tchefuncte River, La.:	
To A. Stickney, major	2,500 00
Improving Tickfaw River, La.:	
To A. Stickney, major	2,000 00
Improving Bayou La Fourche, La.:	
To A. Stickney, major	3,000 00
Improving Bayou Cortableau, La.:	
To A. Stickney, major	1,000 00
Improving Bayou Teche, La.:	
To A. Stickney, major	1,800 00
Improving Tangipahoa River, La.:	
To A. Stickney, major	2,000 00
Improving Amite River, La.:	
To A. Stickney, major	5,000 00
Connecting Bayou Teche with Grand Lake Charenton, La.:	
To A. Stickney, major	2,000 00
Improving mouth of Red River, La.:	
To C. B. Sears, captain	2,500 00
A. Stickney, major	40,500 00
	43,000 00
Deduct repayment:	
By A. Stickney	571 26
	42,428 74
Improving Aransas Pass and Bay, Tex.:	
To W. L. Fisk, lieutenant	15,000 00
Improving Buffalo Bayou, Tex.:	
To S. M. Mansfield, major	25,000 00
Improving mouth of Brazos River, Tex.:	
To S. M. Mansfield, major	15,000 00
Improving Sabine Pass, Tex.:	
To W. H. Heuer, captain	120,087 00
Improving Pass Cavallo, Tex.:	
To W. L. Fisk, lieutenant	40,000 00
S. M. Mansfield, major	20,000 00
	60,000 00
Improving Arkansas River, Ark. and Kans.:	
To M. B. Adams, major	6,000 00
T. H. Handbury, captain	8,000 00
H. S. Tabor, captain	2,000 00
	16,000 00
Improving Black River, Ark. and Mo.:	
To T. H. Handbury, captain	4,000 00
Improving Saline River, Ark.:	
To M. B. Adams, major	2,000 00
Improving White River above Buffalo Shoals, Ark.:	
To T. H. Handbury, captain	3,000 00
Improving White and Saint Francis Rivers, Ark.:	
To M. B. Adams, major	2,000 00

Improving Caney Fork River, Tenn.:
To W. R. King, major $4,000 00

Improving Clinch River, Tenn.:
To W. R. King, major 1,500 00

Improving Cumberland River above Nashville, Tenn.:
To W. R. King, major 9,000 00

Improving Cumberland River below Nashville, Tenn.:
To W. R. King, major 2,000 00

Improving Little Tennessee River, Tenn.:
To W. R. King, major 3,500 00

Improving Obed's Rivern, Tenn.:
To W. R. King, major 5,000 00

Improving Tennessee River below Chattanooga, Tenn., and Ala.:
To J. G. Bennett 50 40
W. R. King, major 25,000 00
25,050 40
Deduct repayment:
By G. H. Elliot 50 40
25,000 00

Improving Big Sandy River, Ky.:
To J. W. Cuyler, major 1,546 71
J. C. Post, captain 30,000 00
31,546 71

Improving Kentucky River, Ky.:
To J. W. Cuyler, captain 584 68
J. C. Post, captain 40,000 00
40,584 68

Improving Treadwater River, Ky.:
To J. C. Post, captain 3,500 00

Operating and care of Louisville and Portland Canal:
To W. E. Merrill, colonel 47 500 00

Improving Ohio River:
To W. E. Merrill, colonel 75,000 00
E. G. Penn 827 46
75,827 46

Improving Rocky River, Ohio:
To L. C. Overman, major 1,390 00

Improving White River, Ind.:
To J. A. Smith, major 5,000 00

Improving Wabash River, Ind. and Ill.:
To J. A. Smith, major 20,000 00

Improving Illinois River, Ill.:
To W. H. H. Benyaurd, major 200,000 00

Survey for the Hennepin Canal:
To W. H. H. Benyaurd, major 1,000 00

Improving Mississippi River:
To O. H. Ernst, major 190,000 00
J. G. D. Knight, captain 477,000 00
W. L. Marshall, captain 497,375 00
A. M. Miller, major 133,000 00
A. Mackenzie, captain 95,000 00
Rittenhouse Moore 10,593 58
C. B. Sears, captain 446,825 00
A. Stickney, major 56,000 00
Strett & Craig 3,763 91
J. H. Willard, lieutenant 37,000 00

Carried forward 1,946,557 49

Improving Mississippi River—Continued.
Deduct repayment:
Brought forward $1,946,557 49
By J. G. D. Knight 20 00
1,946,537 49

Improving Upper Mississippi River:
To A. Mackenzie, major 4,000 00

Reservoirs at headwaters Mississippi River:
To C. J. Allen, major 225,243 30

Dry-dock at Des Moines Rapids Canal, Mississippi River:
To A. Mackenzie, major 18,000 00

Examinations and surveys at South Pass, Mississippi River:
To W. H. Heuer, captain 9,359 67

Constructing jetties and other works at South Pass, Mississippi River:
To J. B. Eads 150,000 00

Improving Mississippi River above Falls of Saint Anthony, Minn.:
To C. J. Allen, major 4,000 00

Improving Mississippi River from Saint Paul to Des Moines Rapids, Minnesota, Iowa, Wisconsin, Illinois, and Missouri:
To A. Mackenzie, major 70,000 00

Improving Des Moines Rapids, Mississippi River, Iowa and Ill.:
To A. Mackenzie, major 11,500 00

Operating and care of Des Moines Rapids Canal, Iowa and Ill.:
To A. Mackenzie, major 47,000 00

Improving Rock Island Rapids, Mississippi River, Mo. and Ill.:
To A. Mackenzie, major 2,000 00

Improving Mississippi River opposite Saint Louis, Mo.:
To O. H. Ernst, major 20,000 00

Mississippi River Commission:
To S. S. Leach, lieutenant 113,500 00
C. B. Sears, captain 35,000 00
A. Stickney, major 1,500 00
150,000 00

Improving Mississippi River at Quincy, Ill.:
To A. Mackenzie, major 7,000 00

Gauging the waters of the Lower Mississippi and its tributaries:
To A. M. Miller, major 2,100 00

Improving, Mississippi, Missouri, and Arkansas Rivers:
To M. B. Adams, major 4,000 00
T. H. Handbury, captain 9,000 00
C. R. Suter, major 35,000 00
48,000 00

Improving Missouri River from its mouth to Sioux City, Iowa:
To C. R. Suter, major 220,000 00

Improving Missouri River from Sioux City, Iowa, to Fort Benton, Mont.:
To J. B. Quinn, captain 43,000 00

Survey of Missouri River from its mouth to Fort Benton, Mont.:		
To C. R. Suter, major		$2,500 00
Improving Gasconade River, Mo.:		
To C. R. Suter, major		500 00
Improving Clinton River, Mich.:		
To D. W. Lockwood, captain	572 29	
O. M. Poe, colonel	13 12	
		585 41
Deduct repayment:		
By F. U. Farquhar, major		585 41
Improving Detroit River, Mich.:		
To F. M. Farqubar, major	13 12	
D. W. Lockwood, captain	12,000 00	
O. M. Poe, colonel	650 94	
		12,664 06
Deduct repayment:		
By F. U. Farquhar, major		12,664 06
Improving Grand River, Mich.:		
To D. W. Lockwood, captain		8,000 00
Improving Hay Lake Channel, Sault Sainte Marie River, Mich.:		
To D. W. Lockwood, captain	30,000 00	
O. M. Poe, colonel	95,000 00	
		125,000 00
Deduct repayment:		
By F. U. Farquhar		24,586 00
		100,414 00
Operating and care of Saint Mary's Falls, Mich.:		
To D. W. Lockwood, captain	5,000 00	
O. M. Poe	32,000 00	
		37,000 00
Deduct repayment:		
By F. U. Farquhar		2,318 37
		34,681 63
Improving Saint Mary's River and Saint Mary's Falls Canal, Mich.:		
To O. M. Poe, colonel		3,307 47
Deduct repayment:		
By F. U. Farquhar		3,307 47
Operating and care of Saint Clair Flats Canal, Mich.:		
To D. W. Lockwood, captain	500 00	
O. M. Poe, colonel	3,500 00	
		4,000 00
Deduct repayment:		
By F. U. Farquhar		504 51
		3,495 49
Improving Saginaw River, Mich.:		
To D. W. Lockwood, major	15,000 00	
O. M. Poe, colonel	107,402 28	
		122,402 28
Deduct repayment:		
By F. U. Farquhar		18,402 28
		104,000 00
Improving Chippewa River at Yellow Bank, Wis.:		
To C. J. Allen, major		17,000 00
Improving Fox and Wisconsin Rivers, Wis.:		
To J. W. Barlow, major		$10,000 00
D. C. Houston, colonel		15,000 00
W. L. Marshall, captain		25,000 00
		50,000 00
Constructing a dam at Goose Rapids, Red River of the North, Minn. and Dak.:		
To C. J. Allen, major		2,500 00
Improving Red River of the North, Minn. and Dak.:		
To C. J. Allen, major		4,000 00
Improving Saint Croix River below Taylor's Falls, Minn. and Wis.:		
To C. J. Allen, major		8,000 00
Improving Yellowstone River, Mont. and Dak.:		
To J. B. Quinn, captain		2,600 00
Improving Lower Clearwater River, Idaho:		
To C. F. Powell, captain		3,000 00
Improving Sacramento and Feather Rivers, Cal.:		
To G. H. Mendell, colonel		15,000 00
Improving San Joaquin River, Cal.:		
To G. H. Mendell, colonel		20,000 00
Improving Petalumas Creek, Cal.:		
To G. H. Mendel, colonel		2,000 00
Breakwater and harbor of refuge between Strait of Fuca and San Francisco, Cal.:		
By A. Stickney	$1,630 19	
Constructing canal around The Cascades of Columbia River, Oreg.:		
To C. F. Powell, captain		50,000 00
Improving Upper Columbia River, Oreg.:		
To C. F. Powell, captain		4,000 00
Improving Lower Willamette and Columbia Rivers, Oreg.:		
To C. F. Powell, captain		5,000 00
Improving Chehalis River, Wash.:		
To C. F. Powell, captain		1,000 00
Improving Skagit, Steilaquamish, Nooksack, Snohomish, and Snoqualmie Rivers, Wash.:		
To C. F. Powell, captain		6,500 00
Testing-flume, invented by M. J. Adams:		
To James Eveleth		4,000 00
Examinations, surveys, and contingencies of rivers and harbors:		
To S. T. Abert, colonel		525 00
M. B. Adams, major		2,300 00
W. H. H. Benyaurd, major		3,000 00
C. E. Blunt, colonel		300 00
C. B. Comstock, colonel		500 00
A. N. Damrell, major		2,600 00
G. H. Elliot, colonel		450 00
Jas. Eveleth		42,500 00
G. L. Gillespie, major		4,050 00
T. H. Handbury, captain		5,000 00
W. R. King, major		3,500 00
D. W. Lockwood, captain		200 00
A. M. Miller, major		4,000 00
J. Mercur, captain		1,300 00
W. McFarland, major		1,350 00
W. E. Merrill, colonel		1,100 00
Carried forward		72,675 00

1883–'84. MILITARY ESTABLISHMENT.

Examinations, surveys, and contingencies of rivers and harbors—Continued.		
Brought forward		$72,675 00
To A. Mackenzie, major		459 36
O. M. Poe, colonel		181 02
J. C. Post, captain		200 00
A. Stickney		2,600 00
H. S. Taber		2,000 00
G. Weitzel, colonel		450 00
		78,565 38
Deduct repayment:		
By F. U. Farquhar		181 02
		78,384 36
Army depot building at Saint Paul, Minn.:		
To J. M. Moore, colonel		23,500 00
Purchase of the Arlington estate:		
To R. N. Batchelder, colonel		25,000 00
Buildings for military headquarters at Fort Snelling, Minnesota:		
By C. Bird	$0 43	
Buildings for military headquarters at Fort Leavenworth, Kansas:		
By G. H. Weeks	$1 05	
Surveys of northern and northwestern lakes, 1883:		
To James Eveleth		3,200 00
D. W. Lockwood, captain		29 76
		3,229 76
Deduct repayment:		
By F. U. Farquhar		29 76
		3,200 00
Survey of northern and northwestern lakes, 1884:		
To James Eveleth		2,400 00
O. M. Poe, colonel		600 00
		3,000 00
Survey of Gettysburg battle-field:		
To James Eveleth		8,000 00
Geographical survey of the territory of the United States west of the one hundredth meridian:		
To M. M. Macomb, lieutenant		1,000 00
G. M. Wheeler, lieutenant		1,000 00
		2,000 00
Deduct repayment:		
By G. M. Wheeler		30
		1,999 70
Removing sunken vessels or crafts obstructing or endangering navigation:		
To J. W. Barlow, major		600 00
A. N. Damrell, major		8,181 80
Q. A. Gillmore, colonel		5,569 95
G. L. Gillespie, major		10,200 00
D. W. Lockwood, captain		1,420 00
C. W. Raymond, major		940 55
A. Stickney, major		100 00
War Department		1,845 20
		28,857 50
Contingencies of the Army, 1881 (transfer account):		
To R. N. Batchelder, colonel		66 30
G. B. Dandy, major		50
		66 80
Contingencies of the Army, 1883:		
To L. S. Ames, lieutenant		$7 50
S. T. Cushing, captain		3 00
W. A. Elderkin, captain		138 50
E. M. Lawton		3,105 00
		3,254 00
Deduct repayments:		
By C. H. Tompkins	$105 00	
G. M. Wheeler	66	
		105 66
		3,148 34
Contingencies of the Army, 1884;		
To E. M. Lawton		15,000 00
W. H. Nash		135 00
C. H. Tompkins		105 00
D. D. Wheeler		360 00
G. M. Wheeler		550 00
War Department		105 00
		16,255 00
Deduct repayment:		
By C. H. Tompkins		105 00
		16,150 00
Publication of Official Records of the War of the Rebellion, 1882:		
By E. M. Lawton	$1 00	
Publication of Official Records of the War of the Rebellion, 1883:		
To E. M. Lawton		27,417 51
Publication of Official Records of the War of the Rebellion, 1884:		
To E. M. Lawton		10,000 00
Expenses of recruiting, 1881 and prior years:		
By D. N. Bash	$2 42	
H. DeB. Clay	31 39	
F. S. Dodge	29	
W. D. Fuller	200 00	
T. McCrea	30 57	
C. D. Mehaffy	579 81	
A. O. Vincent	266 66	
T. J. Wood	8 90	
M. F. Watson	1 50	
		1,121 54
Expenses of recruiting, 1881 and prior years (transfer account):		
By G. C. Cram	$43 40	
H. B. Davidson	1,464 00	
J. T. Kirkman	81	
M. R. Marston	50 25	
A. O. Vincent	1,829 28	
		3,387 74
Expenses of recruiting, 1882:		
To O. B. Boyd		4 00
Deduct from repayments:		
By L. A. Craig	$11 70	
W. I. Sanborn	4 00	
W. M. Waterbury	18 40	
		34 10
Excess of repayments		30 10
Expenses of recruiting, 1883;		
To F. A. Boutelle		2 85
W. G. Purdy		113 40
W. R. Shafter		300 00
Carried forward		416 25

Expenses of recruiting, 1883—Continued.		
Deduct from repayments:		
Brought forward		$416 25
By appropriation account	$106 78	
R. G. Armstrong	49 50	
A. G. Brackett	209 88	
O. B. Boyd	47 48	
F. A. Boutelle	104 71	
C. Bentzoni	67 06	
G. M. Bascom	73 00	
D. L. Craft	62 95	
F. M. Crandel	65 60	
H. C. Cook	75 08	
E. D. Dimmick	13 45	
G. A. Drew	8 50	
C. M. De Long	58 70	
W. S. Edgerly	17 90	
E. M. Heyl	85 72	
J. McE. Hyde	250 00	
T. S. Kirtland	76 75	
W. H. McLaughlin	61 00	
R. Pollock	4 00	
D. Parker	65 50	
J. H. Page	43 50	
W. B. Pease	43 50	
G. M. Randall	38 80	
E. J. Spalding	268 95	
W. R. Shafter	434 78	
E. F. Townsend	250 00	
W. M. Van Horne	76 00	
J. L. Viven	84 75	
S. M. Whiteside	50 40	
C. T. Witherell	61 25	
		2,855 49
Excess of repayments		2,439 24
Expenses of recruiting, 1884:		
To R. Armstrong		49 50
A. G. Brackett, colonel		58,500 00
O. B. Boyd		15 70
C. Bentzoni		67 06
G. M. Bascom		68 50
D. L. Craft		62 95
F. M. Crandal		65 60
H. C. Cook		75 08
C. M. De Long		58 70
E. M. Heyl		30 25
J. McE. Hyde		250 00
T. S. Kirtland		76 75
W. H. McLaughlin		61 00
D. Parker		61 50
J. H. Page		43 50
W. B. Pease		43 50
G. M. Randall		38 80
W. R. Shafter, colonel		39,500 00
E. F. Townsend		250 00
J. L. Viven		49 45
W. M. Van Horne		70 00
S. M. Whiteside		50 40
C. T. Witherell		61 25
		99,549 49
Deduct repayments:		
By appropriation account	$27 40	
F. A. Boutelle	6 96	
A. G. Brackett	15 90	
G. A. Drew	90	
W. R. Shafter	75 18	
		126 34
		99,423 15
Expenses of Commanding General's Office, 1883:		
By O. M. Poe	$161 11	
Expenses of Commanding General's Office, 1884:		
To O. M. Poe, colonel		1,750 00
Oontingencies of the Adjutant-General's Office, 1882:		
By J. P. Martin	$1 25	
Contingencies of the Adjutant-General's Office, 1883:		
By O. D. Greene	$1 80	
Contingencies of the Adjutant-General's Office, 1884:		
To S. Breck, major		$250 00
M. Barber, major		100 00
H. C. Corbin, major		100 00
O. D. Greene, major		150 00
J. C. Kelton, colonel		300 00
O. F. Long, lieutenant		50 00
J. P. Martin, major		200 00
E. R. Platt, major		250 00
J. H. Taylor, major		250 00
T. M. Vincent, colonel		250 00
W. D. Whipple, colonel		300 00
R. Williams, colonel		295 40
H. C. Wood, colonel		50 00
		2,545 40
Deduct repayment:		
By H. C. Corbin		45 40
		2,500 00
Signal Service, 1881 and prior years:		
By C. R. Barnett	$36 00	
B. S. Humphreys	3 75	
A. S. B. Keyes	27 27	
H. C. La Point	27 25	
S. M. Mills	83	
G. T. Olmstead	70 12	
		165 22
Signal Service, 1882:		
By Atchison, Topeka and Santa Fé R. R.	$40 00	
P. C. Hains	80 31	
		120 31
Signal Service, 1883:		
By J. S. Rogers	$2 48	
Signal Service, 1884:		
To S. M. Mills, captain		5,000 00
Signal Service, pay, 1884:		
To A. E. Bates, major		208,000 00
Deduct repayment:		
By A. E. Bates		68 08
		207,931 92
Signal Service, subsistence, 1884:		
To W. H. Nash, captain		154,000 00
War Department		6,004 78
		160,004 78
Signal Service, regular supplies, 1884:		
To R. N. Batchelder, colonel		57,786 75
Deduct repayments:		
By R. N. Batchelder	$302 90	
War Department	441 33	
		744 23
		57,042 52
Signal Service, incidental expenses, 1884:		
To R. N. Batchelder, colonel		1,475 00
Signal Service, transportation, 1884:		
To Atchison, Topeka and Santa Fé R. R		6 14
R. N. Batchelder, colonel		18,280 22
Carried forward		18,286 36

Signal Service, transportation, 1884—Continued.
Brought forward $18,286 36
To Chicago and Northwestern R. R..... 24 18
Chicago, Saint Paul, M. and O. R. R 10 00
Galveston, Harrisburg and S. A. R. R..... 2 75
Missouri Pacific R. R 2 16
Saint Louis and San Francisco R. R..... 6 44
Wicomico and Pocomoke R.R. 30
Western Stage Company..... 10 40
18,342 59

Signal Service, barracks and quarters, 1884:
To R. N. Batchelder, colonel..... 85,908 00

Signal Service, clothing and camp and garrison equipage, 1884:
To R. N. Batchelder, colonel..... 8,160 18
Deduct repayment:
By War Department..... 18 38
8,141 80

Signal Service, Medical Department, 1884:
To C. C. Arms 15 75
L. L. Alexander 11 50
F. B. Bishop 25 95
L. F. Babcock 43 15
J. H. Blue 13 25
W. J H. Bellamy 15 50
A. G. Brisbins 51 35
T. M. Colley..... 6 00
A. W. Cantwell..... 15 55
T. Colley 21 00
M. G. Cockey..... 110 00
W. G. Curtis..... 22 00
T. Duhig 21 50
J. B. Dyott 16 50
S. H. Dow 54 00
R. C. Eve..... 37 20
T. L. Gelger 66 10
F. W. Hughes 8 25
J. Houghton..... 20 75
B. P. Hobbs 6 00
J. M. Hingston 8 75
J. W. Kingston..... 5 00
J. R. Lemen 57 20
R. O. Leary..... 35 00
C. B. Lincoln 180 00
F. T. Lincoln 22 00
F. L. Matthews..... 10 90
J. C. Murry..... 58 00
C. Mitchell 6 50
C. J. Mitchell..... 10 85
J. Milhaus Sons..... 80
J. Milkhaus 6 25
R. W. Mitchell 31 20
F. B. Mace 8 65
F. T. Moffet 155 00
H. F. McCormick..... 29 00
Kates Miles 34 00
F. D. Mount 6 00
J. Nolan..... 142 00
W. G. Ogier 19 00
J. W. V. R. Plummer 64 55
S. J. Power 7 50
J. S. Parson 13 50
M. F. Price 120 50
H. M. Paine 16 00
J. C. Rea 13 20
E. M. Rosenkrans..... 85 45
Boardman Reed 52 00
J. S. Ridgely 26 29
J. N. Reynolds..... 20 00
H. T. Reynolds 12 65
P. D. Sims 16 30
Carried forward 1,855 34

Signal Service, Medical Department, 1884—Continued.
Brought forward $1,855 34
To W. N. Smart..... 12 25
G. M. Shillits 32 65
W. T. Sutton 6 00
C. Sweeting 18 15
A. B. Thrasher 14 15
R. Y. H. Thomas..... 5 00
S. B. Ward 12 95
W. M. Welch..... 14 20
J. A. Wilcox..... 6 00
W. S. Watson..... 13 25
C. H. Wilkinson 7 00
A. J. Woodward..... 15 35
H. S. Wyman..... 25 00
Wakelee & Co..... 6 75
War Department..... 1,366 02
W. O. Young 39 15
3,449 21

Observation and report of storms, 1881 and prior years:
By H. W. Howgate.... $3,743 46
S. M. Mills..... 18 543 91
War Department.. 40
22,287 77

Observation and report of storms, 1882:
To S. M. Mills..... 40 00
Deduct from repayments:
By F. F. Kislingbury.... $40 00
War Department.... 3 20
43 20
Excess of repayments..... 3 20

Observation and report of storms, 1883:
To E. R. Crebbin..... 107 50
Deduct repayment:
By W. B. Hazen..... 107 50

Observation and report of storms, 1884:
To S. M. Mills, captain..... 240,773 76
Deduct repayment:
By S. M. Mills..... 2 50
240,771 26

Observation and exploration in the Arctic Seas:
To S. M. Mills, captain..... 12,945 30
J. T. Pratt 57 20
13,002 50
Deduct repayment:
By S. M. Mills..... 2 50
13,000 00

Expenses of military convicts, 1883:
To W. C. Jones, Kansas State prison..... 1,037 05
J. A. Reed, Minnesota State prison..... 140 25
J. A. Stratton, Oregon State prison..... 148 57
1,325 87

Expenses of military convicts, 1884:
To W. C. Jones, Kansas State prison..... 5,077 95
J. A. Reed, Minnesota State prison..... 719 00
J. A. Stratton, Oregon State prison..... 95 71
5,892 66

Artillery school at Fortress Monroe, Virginia, 1884:
To S. Pratt, lieutenant $3,000 00

Construction, maintenance, and repairs of military telegraph lines, 1884 and prior years:
By Atchison Topeka and Santa Fé R. R. Co $9 50
S. M. Mills 05
L. E. Sebree 2 01
11 56

Construction, maintenance, and repairs of military telegraph lines, 1882:
By L. E. Sebree $3 38

Construction, maintenance, and repairs of military telegraph lines, 1883:
By W. A. Glassford $0 03
L. E. Sebree 02
War Department .. 4 10
4 15

Maintenance and repair of military telegraph lines, 1884:
To S. M. Mills 32,000 00
War Department 38 25
32,038 25

Support of National Homes for Disabled Volunteer Soldiers, 1884:
To W. B. Franklin, general 1,122,088 03

Support of Soldiers' Home (indefinite):
To Soldiers' Home 355,505 56
Deduct repayment:
By Soldiers' Home 65 65
355,439 91

Soldiers' Home, permanent fund:
To B. F. Rittenhouse, captain 126,600 00

Support of Soldiers' Home, interest account:
To B. F. Rittenhouse, captain 3,494 75

Support of Military Prison, Fort Leavenworth, Kans., 1883:
By W. Badger $64 90

Support of Military Prison, Fort Leavenworth, Kans., 1884:
To W. Badger, captain 19,565 23
A. P. Blunt 73,911 92
93,477 15

Extra pay to officers and men who served in the Mexican war:
To A. B. Carey, major 500 00

Military posts:
To J. D. Bingham, colonel 10,000 00
G. B. Dandy, major 65,000 00
J. Gilliss, major 25,000 00
A. S. Kimball, major 25,000 00
A. J. McGonnigle, major 75,000 00
200,000 00

Construction of a post on North Fork of Loup River, Nebraska, 1881 and prior years:
By C. L. Whitney $3 00

Military posts for the protection of the Rio Grande frontier:
To A. J. Evans $1,000 00
J. G. C. Lee 70,476 00
71,476 00
Deduct repayment:
By J. G. C. Lee 56 68
71,419 32

Construction of military post on Yellowstone and Musselshell Rivers:
By G. Ruhlen $9 50

Bounty under act of July 28, 1866, 1880 and prior years:
To A. B. Carey, major 50,590 96
J. R. Roche, major 3,000 00
G. R. Smith, major 6,309 04
H. C. Swain, major 100 00
60,000 00

Bounty act, July 28, 1866, indefinite:
By appropriation acc't. $500 00
W. Arthur 307 20
A. B. Carey 397 25
1,204 45

Reimbursing State and citizens of California for expenses in suppressing Modoc Indian hostilities:
To C. Blair 54 73
J. C. Fair 54 73
S. Hull 54 73
J. Hull 54 73
J. H. Miller 14 03
B. Walton 14 03
J. D. Walker 14 03
261 01

Claims for quartermasters' stores and commissary supplies, act March 1, 1883:
To A. G. Collins 17 50
J. R. Carpenter 125 00
J. Dyer 300 00
W. Eastep 125 00
W. R. Fulkerson 248 00
S. Holloway 120 00
O. V. Hise 135 00
Z. Hodges 57 00
W. G. Humphrey 270 00
W. Kerr 280 00
M. B. Lynch 125 00
M. A. McAllister 15 00
G. McCrary 45 58
Jno. Morgan 110 00
W. Martin 125 00
P. H. Price 160 00
T. Roark 125 00
O. Skillem 100 00
H. L. Staggs 145 00
L. B. Turner 32 00
L. Wester 70 00
2,730 08
Deduct repayment:
By J. R. Bland 125 00
2,605 08

Army and Navy Hospital, Hot Springs, Ark.:
To J. W. Jacobs, captain 55,000 00
J. L. Smithmeyer & Co .. 1,000 00
56,000 00

Claims of loyal citizens, &c.:		
By Treasurer United States.....	$100 00	
Relief of Kirk W. Noyes:		
To Treasurer United States		$23 11
Kirk W. Noyes		491 64
		514 75
Relief of T. J. Boyles, administrator estate of M. Radich, deceased:		
To T. J. Boyles.....		440 40
Relief of sufferers from overflow of Ohio River and its tributaries:		
To A. Beckwith, colonel.....		100,000 00
S. T. Cushing, captain.....		135,000 00
J. R. Roche, major.....		1,000 00
R. Saxton, colonel.....		125,000 00
Treasury Department.....		243 60
		361,243 60
Deduct repayments:		
By W. H. Bell $25,490 36		
S. T. Cushing 5,723 37		
Carried forward 31,213 73		361,243 60

Relief of sufferers from overflow of Ohio River and its tributaries—Continued.		
Deduct repayments:		
Brought forward..$31,213 73		$361,243 60
By R. Saxton 2,766 91		33,980 64
		327,262 96
Relief of sufferers from overflow of Mississippi River and its tributaries:		
To A. Beckwith, colonel.....		55,000 00
J. R. Roche, major.....		1,000 00
F. F. Whitehead		114,000 00
		170,000 00
Relief of Sallie A. Spence:		
To Sallie A. Spence.....		100 00
Relief of Santiago de Leon:		
To S. de Leon		2,988 0\
Relief of M. J. Kelly, late chaplain U. S. Army, and others of Co. B, Twentieth U. S. Infantry:		
To A. M. Simon.....		53 27

NAVAL ESTABLISHMENT.

Pay of the Navy, prior to July 1, 1879:		
To adjustment of appropriation..		7 47
T. H. Looker		92 48
		99 95
Deduct repayment:		
By R. Washington		30 87
		69 08
Pay of the Navy, prior to July 1, 1880:		
To adjustment of appropriations.		309 00
T. Bibbin.....		24 25
T. H. Looker		630 28
Fritz Rachenbach.....		18 37
R. Washington.....		500 00
		1,481 90
Deduct repayment:		
By R. Washington.....		73 83
		1,408 07
Pay of the Navy:		
To C. W. Abbot.....		95,000 00
M. S. Adams.....		42 69
Ah Fat		169 69
Ah Foo		32 97
Ah Fung.....		23 39
Ah Hong		16 83
Ah Jack		40 18
Ah Jay		28 61
Ah Long		45 90
G. M. Allen.....		83 56
R. M. Allen		225,500 00
E. L. Amory		5 48
H. B. Andrews		18 21
E. T. Atkinson deceased.....		6 79
Adjustment of appropriations.		3,723,746 59
J. P. Augur, deceased.....		197 17
John Babe, deceased.....		207 33
A. W. Bacon.....		10 81
W. Baker, deceased.....		79 70
H. L. Ballentine		18 21
G. Barrett.....		6 85
Carried forward.....		4,045,280 87

Pay of the Navy—Continued.		
Brought forward.....		$4,045,280 87
To R. Barry		183 84
J. Q. Barton		229 67
R. J. Beach		886 82
G. W. Beaman		29,000 00
G. E. Benjamin.....		74 03
J. M. Berrien, deceased		533 90
J. F. Beveridge, deceased		300 60
T. Beverly, deceased.....		20 43
C. J. Bibler.....		10 91
L. G. Billings		65
J. F. Bingham.....		40 29
L. G. Boggs		87 60
F. E. Brents		18 21
J. Brocken		645 65
J. H. Brown, deceased		8 77
Z. T. Brown		5,000 00
J. C. Burnett		427 40
M. Carter.....		159 14
S. F. Clarke, deceased.....		66 75
T. T. Caswell.....		165,000 00
G. Cochran		2,177 13
H. G. Colby.....		10,000 00
J. H. Colwell		918 34
James Conley.....		451 05
J. Conley, deceased		18 80
John Conroy, deceased.....		19 19
G. H. Cooper		460 82
S. E. Cooper		9 34
J. Corvine		39 32
C. H. Craven		267 66
M. S. Craven		183 43
J. B. Creighton		160 19
St. Leger Crone		64 82
E. D. Cushing		215 55
M. D. Cushing.....		445 50
C. H. Cushman, deceased		79 04
T. Davidson, deceased		10 80
H. M. Denniston.....		188 60
A. Dressler.....		662 45
M. J. Donnell.....		918 34
E. C. Doran.....		271 03
F. B. Doust.....		929 59
C. H. Eldredge		140,000 00
F. B. Ellison.....		230 99
L. A. Frailey		78,000 00
Carried forward.....		4,484,697 51

1883–'84. NAVAL ESTABLISHMENT.

Pay of the Navy—Continued.

Brought forward		$4,484,697 51
To M. Franciscovitch		20 01
Frank F. Fletcher		165 30
J. Foster		150,500 00
A. T. Freeman		36 31
W. F. Gaines, deceased		16 40
R. W. Galt		19 73
B. J. Gant		12 68
A. Gentle		73 89
A. H. Gilman		30,000 00
W. W. Godding		75 00
W. Goldsborough		201 15
J. Graham, deceased		175 85
C. Green, deceased		161 35
W. Grounda		187 67
L. S. Gwyn		176 00
R. P. Haines		18 21
W. H. Harris		62 19
E. Hartt		480 82
W. T. Hayes, deceased		2 89
J. Himicks		169 19
I. G. Hobbs		37 43
W. B. Hoff		1,146 24
J. Hay		730,000 00
N. M. Hubbard		286 26
H. J. Hunt		10 00
T. A. Hunt		215 61
J. W. Jordan		14,500 00
W. H. King		199 28
C. Keock		64 66
J. Knott		241 22
S. R. Knox		49 18
John Lacey, deceased		76 25
C. Laird		56 95
C. H. Lauchheimer		18 21
J. Lauterbach		420 22
H. W. Leach		28 92
C. J. Lewis, deceased		32 82
T. H. Looker		105,000 00
M. Looney		109 05
P. Lovet, deceased		635 80
P. J. Lynch, deceased		91 00
E. Mack		82 02
J. E. Mahony		27 80
W. A. Malcom		130 91
W. Martin		7 67
B. McAlvaine, deceased		85 37
J. McCann		51 16
R. S. McConnell		18 46
A. H. McCormick		212 80
J. McGinness		29 47
M. C. McGowan		38 40
S. T. McKee		918 34
F. McLellan		60 06
J. MacMahon		102,000 00
B. McMarrah		25 12
A. Merte		195 22
E. Middleton		277 21
E. Mitchell		69 82
Olaf Moa		15 50
A. Moritz		962 13
S. B. Morrison		448 68
W. Morton, deceased		465 68
J. A. Mudd		223 24
F. W. Nabor		30 63
L. Newcomb		94 06
J. A. Norris		5 63
B. Noyes, deceased		100 00
C. S. Noyes		411 21
F. W. Nugent, deceased		329 88
A. M. Owen, deceased		145 14
A. C. Parsons		918 34
C. Perry, deceased		933 16
G. E. Perry		916 95
John Peppard		253 52
A. Peterson		9,512 00
D. L. Printress		918 34
A. J. Pritchard		143,000 00
Fritz Rachenbach		72 69
S. Rand		67,500 00
C. W. Ray		169 26
J. B. Redfield		87,000 00
Carried forward		5,945,127 12

Pay of the Navy—Continued.

Brought forward		$5,945,127 12
To H. J. Robinson		31 10
T. Robinson, deceased		3 69
J. M. Roche		9,500 00
N. G. Rodgers		7 68
E. B. Rodgers		5 49
N. Ross, deceased		96 06
M. Rush		10 41
A. W. Russell		99,000 00
C. Schenck		30,000 00
C. A. Schmitz		7 33
O. B. Shallenberger		925 61
D. E. Shea		93 63
James Sheppard, deceased		101 92
T. W. Shepard		88
W. H. Schuetze		3,159 09
F. Singer		207 13
H. T. Skelding		159,000 00
H. Sleeper		313 79
M. M. Smith		235 65
W. S. Smith		886 83
J. N. Speel		109 92
T. H. Stevens		163 36
J. H. Stevenson		403,000 00
R. Stewart		54 15
H. J. Stone, deceased		82 10
James Sutton, deceased		437 71
W. Swan		793 54
A. Sweetman		468 01
J. F. Tarbell		261,000 00
B. B. Tayler, deceased		91 97
S. D. Trenchard		184 83
G. E. Thornton		40,000 00
F. E. Upton		447 57
J. Veara, deceased		171 53
C. P. Wallach		32,000 00
R. Washington		60,000 00
W. T. Webster		950 00
John Wordman		270 63
J. Whalen, deceased		19 19
E. N. Whitehouse		213 73
W. B. Whiting, deceased		42 68
W. W. Williams		155 29
J. Willis		149 59
H. Wilson		25 74
G. Wood, deceased		241 21
S. H. Wright		164 78
F. H. Wyeth		270 63
C. K. Yancey		406 25
		7,050,627 82

Deduct repayments:

By adjustment of appropriations	$5,204 63	
G. W. Beaman	1,496 10	
Z. T. Brown	7,471 17	
F. C. Cosby	300 00	
H. G. Colby	1,000 00	
W. H. Gartley	31 65	
J. M. Gore	27 36	
G. A. Lyon	14,705 86	
G. R. Martin	125 00	
H. H. Pangborn	850 00	
W. H. Parker	125 00	
J. H. Stevenson	3,949 42	
W. H. Schuetze	650 61	
G. E. Thornton	10,329 17	
R. Washington	860 01	
J. M. Wade	1,000 00	
		48,125 98
		7,002,501 84

Pay, miscellaneous, 1881 and prior years:

By T. T. Caswell	$3,951 48	
A. W. Russell	631 82	
G. E. Thornton	1,813 72	
R. Washington	5,416 75	
		11,813 77

1883-'84. NAVAL ESTABLISHMENT.

Pay, miscellaneous, 1882:		
To adjustment of appropriations.		$260 90
J. H. Barry		260 88
T. T. Caswell		10 72
G. Cochran		73 00
T. H. Looker		181 00
A. J. Pritchard		73 00
		859 50
Deduct from repayments:		
By adjustment of appropriations	$21 24	
T. T. Caswell	2,132 78	
F. S. Larkin	3 84	
A. W. Russell	1,471 73	
G. E. Thornton	2,195 80	
R. Washington	523 78	
		6,349 17
Excess of repayments		5,489 67
Pay, miscellaneous, 1883:		
To adjustment of appropriations.		418 99
T. T. Caswell		212 62
T. H. Looker		100 00
A. J. Pritchard		836 26
Seligman Bros		5,419 82
G. E. Thornton		1,000 00
C. P. Wallach		3 55
		7,993 24
Deduct from repayments:		
By adjustment of appropriations	$560 96	
R. W. Allen	7 88	
G. W. Beaman	204 80	
Z. T. Brown	108 30	
T. T. Caswell	995 98	
H. G. Colby	3,204 37	
L. A. Frailey	1 10	
G. A. Lyon	75	
J. MacMahon	31 87	
A. J. Pritchard	176 88	
S. Rand	2 40	
A. W. Russell	145 95	
C. Schenck	160 72	
H. T. Skelding	309 60	
J. H. Stevenson	07	
G. E. Thornton	709 05	
J. F. Tarbell	4 97	
C. P. Wallach	1,378 47	
R. Washington	296 65	
		8,300 77
Excess of repayments		307 53
Pay, miscellaneous, 1884:		
To C. W. Abbot		8,000 00
E. O. Acker		247 04
R. W. Allen		7,755 00
F. Anderson		164 94
Adjustment of appropriations.		78,231 36
N. L. Bates		121 64
G. W. Beaman		652 56
Z. T. Brown		500 00
C. Caponilliez		7 50
T. T. Caswell		32,500 00
H. G. Colby		2,500 00
C. S. Cotton		56 33
L. W. Curtis		123 52
D. Delehanty		120 96
C. H. Eldredge		1,240 00
L. A. Frailey		5,377 00
C. F. Forse		336 00
J. Foster		2,249 28
A. S. Green		211 53
A. H. Gutman		6,000 00
E. Hartt, deceased		38 24
H. L. Hawthorne		29 76
R. B. Higgins		13 52
I. G. Hobbs		34 50
J. Hay		11,100 00
R. E. Impery		183 71
Carried forward		157,794 69

Pay, miscellaneous, 1884—Cont'd.		
Brought forward		$157,794 69
To M. Johnston		11 50
J. W. Jordan		697 48
F. B. King		2 50
J. H. Kitts		29 26
J. H. Linnard		40 69
T. H. Looker		35,000 00
G. A. Lyon		174 32
J. McMahon		5,400 00
C. C. Marsh		178 96
J. R. Martin		238 38
R. Moh		51 92
W. L. Nicoll		561 28
J. E. Palmer		178 68
C. C. Pearson		30 56
A. Peterson		1,300 00
A. J. Pritchard		5,000 00
S. Rand		2,800 00
G. D. Ransom		8 86
J. B. Redfield		5,000 00
W. Redstone		244 48
A. Reynard		150 35
J. M. Roche		1,065 00
A. W. Russell		11,250 00
C. Schenck		20,000 00
H. T. Skelding		6,100 00
W. H. Schuetze		133 04
S. Sprigg		28 44
G. M. Stoney		244 48
J. H. Stevenson		5,117 00
J. F. Tarbell		5,825 34
G. E. Thornton		5,000 00
C. P. Wallach		5,000 00
R. Washington		10,000 00
G. F. F. Wilde		161 76
H. A. Worts		232 60
J. D. A. Ziegler		40 90
		285,092 47
Deduct repayments:		
By adjustment of appropriations	$337 05	
J. H. Stevenson	63 79	
G. E. Thornton	3,241 52	
R. Washington	1,466 28	
		5,108 64
		279,983 83
Contingent, Navy, 1881 and prior years:		
By R. D. Thorburn	$36 00	
Contingent, Navy, 1882:		
To adjustment of appropriations.		122 85
R. Washington		97 40
		220 25
Deduct repayment:		
By C. Schenck		7 12
		213 13
Contingent, Navy, 1883:		
To adjustment of appropriations.		15,303 67
Z. T. Brown		8 00
T. T. Caswell		283 15
T. M. Looker		50 00
John MacMahon		4 00
A. W. Russell		332 29
Seligman Bros		1,958 65
C. Schenck		114 00
C. P. Wallach		4 25
R. Washington		500 00
		18,558 01
Deduct repayments:		
By adjustment of appropriations	$2,390 36	
Z. T. Brown	2 44	
T. T. Caswell	5 68	
T. H. Looker	4 01	
Carried forward	2,402 49	18,558 01

1883-'84. NAVAL ESTABLISHMENT.

Contingent, Navy, 1883—Continued.
Deduct repayments:
Brought forward. $2,402 49 $18,558 01
By J. MacMahon 62
A. J. Pritchard..... 66 28
C. Schenck..... 71 75
H. T. Skelding 8 99
G. E. Thornton..... 47 88
C. P. Wallach 2 67
R. Washington..... 160 06
2,760 24
15,797 77

Contingent, Navy, 1884:
To C. W. Abbot..... 5,350 00
R. W. Allen 240 50
Adjustment of appropriations 20,652 32
Z. T. Brown 9 00
T. T. Caswell 13,000 00
C. H. Davis..... 5,000 00
C. H. Eldredge 15 00
R. B. Ferris 100 00
J. Hay 1,300 00
T. H. Looker 14,500 00
J. MacMahon 918 00
A. Peterson 55 00
A. J. Pritchard 3,000 00
S. Rand 341 95
J. M. Roche 863 00
A. W. Russell 7,807 50
C. Schenck 5,400 00
M. A. Shufelt..... 750 00
H. T. Skelding 100 00
G. E. Thornton 4,000 00
Treasury Department 1,551 45
C. P. Wallach 3,800 00
R. Washington..... 12,000 00
100,753 72
Deduct repayments:
By adjustment of appropriations..... $192 02
C. H. Davis 1,734 68
G. E. Thornton..... 601 18
R. Washington..... 395 82
2,923 70
97,830 02

Accrued mileage, Navy and Marine Corps:
To adjustment of appropriations 8,380 02
Deduct repayments:
By A. W. Russell..... $960 20
C. Schenck..... 2,985 24
G. E. Thornton..... 2,469 25
R. Washington 1,750 55
8,165 24
214 78

Pay of Marine Corps prior to July 1, 1878:
To adjustment of appropriations 66 72

Pay of Marine Corps prior to July 1, 1879:
By R. Washington $23 20

Pay of the Marine Corps:
To C. W. Abbot..... 4,000 00
S. R. Allen, deceased..... 73 00
C. H. Atwood..... 146 62
Adjustment of appropriations 188,675 13
Benj. Banger, deceased..... 27 05
R. Bates..... 131 93
A. Betz..... 15 19
D. C. Bryant..... 8 71
G. Butler..... 1,097 86
L. J. Byrne..... 84 21
Carried forward 194,259 70

Pay of the Marine Corps—Cont'd.
Brought forward..... $194,259 70
To T. T. Caswell..... 2,000 00
J. W. Conroy..... 42 73
J. B. Daly 24 00
J. E. Dollard 53 44
C. A. Fugitt..... 70 74
G. C. Goodloe..... 420,000 00
F. W. Grayson 5,573 80
C. F. Hesse, deceased..... 38 64
H. Hitcherd..... 16 24
E. Homer 44 82
R. W. Huntington..... 82 79
T. H. Looker 4,000 00
T. McGuire 54 00
N. S. Nokes, deceased 48 14
A. J. Pritchard..... 200 00
M. J. Quigley..... 28 20
T. W. Quigley 28 20
A. W. Russell 4,400 00
C. S. Schenck..... 1,000 00
J. Shea..... 61 40
G. Shibe..... 38 40
T. J. Trainer, deceased..... 88 93
M. Walker 9 01
W. Wallace, deceased 76 93
A. L. Watson, deceased..... 335 47
G. M. Wells, deceased 78 63
I. Woods..... 122 42
C. P. Wallach..... 3,000 00
J. M. T. Young 316 23
636,092 86
Deduct repayments:
By G. E. Thornton..... $1,600 10
R. Washington..... 780 13
2,380 23
633,712 63

Provisions, Marine Corps, 1882:
To W. B. Slack 28 80

Provisions, Marine Corps, 1883;
To adjustment of appropriations. 90 22
W. B. Slack..... 2,137 99
2,228 21
Deduct repayments:
By adjustment of appropriations $3 00
W. B. Slack..... 87 22
90 22
2,137 99

Provisions, Marine Corps, 1884:
To adjustment of appropriations. 1,431 59
A Britz 26 00
W. B. Slack..... 58,500 00
O. Woods 26 00
59,983 59

Clothing, Marine Corps, 1882:
To adjustment of appropriations. 269 53
W. B. Slack..... 30 40
299 93
Deduct from repayment:
By adjustment of appropriations. 1,439 08
Excess of repayment..... 1,139 15

Clothing, Marine Corps, 1883:
To A. J. Pritchard..... 4 00
Deduct from repayments:
By adjustment of appropriations..... $1,950 29
H. B. Lowry..... 1,172 10
Navy Department . 8 44
A. J. Pritchard..... 29
W. B. Slack..... 470 32
3,601 44
Excess of repayments.... 3,597 44

Clothing, Marine Corps, 1884:
To adjustment of appropriations. $52 20
H. B. Lowry 12,447 80
W. B. Slack..... 66,200 00
78 700 00
Deduct repayments:
By adjustment of appropriations..... $1,663 37
W. B. Slack..... 500 00
2,163 37
76,536 63

Fuel, Marine Corps, 1882:
To W. B. Slack..... 28 80

Fuel, Marine Corps, 1883:
To W. B. Slack..... 1,164 94
Deduct repayment:
By W. B. Slack..... 970 96
193 98

Fuel, Marine Corps, 1884,:
To W. B. Slack..... 20,800 00
Deduct repayment:
By W B. Slack 2,823 59
17,976 41

Military stores, Marine Corps, 1883:
By adjustment of appropriations..... $131 49
W. B. Slack..... 178 72
310 21

Military stores, Marine Corps, 1884:
To adjustment of appropriations 2 43
W. B. Slack..... 9,500 00
9,502 43
Deduct repayment:
By adjustment of appropriation. 79 75
9,422 68

Transportation and recuiting, Marine Corps, 1882:
To adjustment of appropriations 242 77

Transportation and recruiting, Marine Corps, 1883:
To adjustment of appropriations. 1,001 65
New York Herald..... 702 00
1,703 65
Deduct from repayments:
By adjustment of appropriations..... $45 54
W. B. Slack 2,155 20
2,200 74
Excess of repayments.... 497 09

Transportation and recruiting Marine Corps, 1884:
To adjustment of appropriations. 2,357 00
New York Herald..... 18 00
C. Schenck..... 25 00
W. B. Slack 7,500 00
C. P. Wallach 100 00
10,000 00

Marine Barracks, Washington, D. C., 1882:
To adjustment of appropriation. 9 29

Repairs of barracks, Marine Corps, 1883:
By W. B. Slack $154 05

Repairs of barracks, Marine Corps, 1884:
To W. B. Slack $10,000 00

Forage for horses, Marine Corps, 1882:
By W. B. Slack $572 45

Forage for horses, Marine Corps, 1884;
To W. B. Slack..... 3,550 00

Contingent, Marine Corps, 1883:
To adjustment of appropriation . 80 53
Chicago and Rock Island R. R. Co 10 35
Goodsall, Perkins & Co 12 60
J. Stockton, agent..... 16 48
Joseph Stockton 1 93
W. G. Purdy 5 49
Union Pacific Rw'y Co..... 90 51
C. P. Wallach 10 00
227 89
Deduct from repayments:
By adjustment of appropriation..... $619 23
W. B. Slack 261 69
880 92
Excess of repayments.... 653 03

Contingent, Marine Corps, 1884:
To adjustment of appropriation 243 82
G. F. Gilbert 2 02
W. B. Slack 24,800 00
J. Stockton..... 19 96
25,065 80
Deduct repayments:
By adjustment of appropriation $40 48
W. B. Slack 25 64
66 12
24,999 68

Pay of professors and others, Naval Academy, 1883:
By R. W. Allen $14 50

Pay of professors and others, Naval Academy, 1884:
To adjustment of appropriation . 81 75
R. W. Allen 52,500 00
52,581 75

Pay of watchmen and others, Naval Academy, 1884:
To R. W. Allen 23,062 50

Pay of mechanics and others, Naval Academy, 1883:
By R. W. Allen $0 18

Pay of mechanics and others, Naval Academy, 1884:
To R. W. Allen 14,590 23

Pay of steam employés, Naval Academy, 1883:
By R. W. Allen $100 85

Pay of steam employés, Naval Academy, 1884:
To R. W. Allen 7,671 00

Repairs of Naval Academy, 1884:
To R. W. Allen 21,000 00

Heating and lighting Naval Academy, 1884:
To R. W. Allen 17,000 00

Library, Naval Academy, 1884:
To R. W. Allen $2,000 00

Stationery, Naval Academy, 1884:
To R. W. Allen 2,000 00

Board of Visitors, Naval Academy, 1883:
By R. W. Allen $8 25

Board of Visitors, Naval Academy, 1884:
To R. W. Allen 1,500 00

Chemistry, Naval Academy, 1884:
To R. M. Allen 2,500 00

Miscellaneous, Naval Academy, 1884:
To R. W. Allen..... 34,600 00

Stores, Naval Academy, 1884:
To R. W. Allen..... 800 00

Materials, Naval Academy, 1884:
To R. W. Allen..... 1,000 00

Ocean surveys, Navigation, 1884:
To adjustment of appropriation . 5,788 48
T. H. Looker..... 482 00
C. Schenck..... 37 00
R. Washington..... 800 00
7,107 48

Deduct repayments:
By C. Schenck $0 55
R. Washington..... 02
57
7,106 91

Navigation and navigation supplies, 1882:
To adjustment of appropriation . 159 31

Navigation and navigation supplies, 1883:
To adjustment of appropriation . 3,544 00
T. T. Caswell 2,795 00
C. Schenck..... 64 00
Seligman Bros 575 93
H. T. Skelding..... 319 00
G. E. Thornton 838 00
Treasury Department..... 12,064 33
C. P. Wallach..... 5 00
R. Washington 1,157 00
21,362 26

Deduct repayments:
By adjustment of appropriations..... $323 09
T. T. Caswell 426 09
L. A. Frailey..... 11 97
G. A. Lyon 148 57
J. Macmahon 59 66
A. W. Russell..... 25
C. Schenck..... 50
H. F. Skelding..... 5 00
J. H. Stevenson..... 39 00
J. F. Tarbell..... 238 35
G. E. Thornton 50
C. P. Wallach..... 75
R. Washington..... 292 35
1,546 08
19,816 18

Navigation and navigation supplies, 1884:
To C. W. Abbot 5,146 00
H. C. C. Atwood 12 00
Adjustment of appropriation. 17,864 47
T. T. Caswell 23,995 00

Carried forward..... 47,017 47

Navigation and navigation supplies, 1884—Continued.
Brought forward..... $47,017 47
To H. G. Colby 200 00
C. H. Eldredge..... 1,780 00
L. A. Frailey..... 920 00
A. H. Gilman 3,909 00
James Hoy..... 4,500 00
J. W. Jordan 286 92
T. H. Looker..... 862 00
John Macmahon 800 00
Navy Department..... 690 17
J. B. Redfield 770 00
A. W. Russell..... 91 00
J. H. Stevenson..... 5,623 00
H. T. Skelding 662 60
C. Schenck..... 143 00
J. F. Tarbell 900 00
G. E. Thornton 645 00
Treasury Department..... 13,682 71
R. Washington..... 421 00
C. P. Wallach 63 00
83,966 87

Deduct repayments:
By adjustment of appropriation $324 34
C. W. Abbot..... 1 44
W. B. Morgan..... 138 21
Navy Department.. 315 00
A. W. Russell 90
C. Schenck 60
J. H. Stevenson 92 71
J. E. Thornton 86
R. Washington 1 90
C. P. Wallach 2 10
878 06
83,088 81

Civil establishment, Navigation, 1883:
By L. A. Frailey $0 76
J. H. Stevenson..... 67
1 43

Civil establishment, Navigation, 1884:
To H. G. Colby 100 00
C. H. Eldredge 349 04
L. A. Frailey 1,075 00
James Hoy..... 78 00
John Macmahon 1,001 00
J. B. Redfield..... 899 98
H. T. Skelding 78 00
J. H. Stevenson 1,059 00
J. F. Tarbell..... 339 00
4,979 02

Deduct repayments:
By J. H. Stevenson $8 05
H. T. Skelding 15 00
23 05
4,955 97

Contingent, Navigation, 1882:
To adjustment of appropriation.. 13 30

Contingent, Navigation, 1883:
To C. W. Abbot..... 2 00
Adjustment of appropriation. 487 13
A. W. Russell..... 2 00
G. A. Thornton..... 20 00
Treasurer United States..... 12 00
R. Washington..... 22 00
545 13

Deduct repayments:
By adjustment of appropriation $3 11
C. W. Abbot..... 80

Carried forward . 3 91 545 13

Contingent, Navigation, 1883—Continued.		
Deduct repayments:		
Brought forward	$3 91	$545 13
By T. T. Caswell	78 88	
A. W. Russell	1 72	
C. Schenck	13	
G. E. Thornton	15 57	
R. Washington	4 71	
		104 92
		440 21
Contingent, Navigation, 1884:		
To C. W. Abbot		63 00
Adjustment of appropriation		777 36
Baltimore and Ohio R. R.		1 03
T. T. Caswell		1,686 00
John E. Davidson		19 68
A. H. Gilman		7 00
James Hoy		225 00
J. W. Jordan		17 68
W. H. Ijams		1 84
T. H. Looker		719 00
John Macmahon		6 00
A. W. Russell		80 00
C. Schenck		280 00
Treasurer United States		21 00
G. E. Thornton		9 00
R. Washington		118 00
C. P. Wallach		100 00
		4,131 59
Deduct repayments:		
By C. W. Abbot	$2 85	
A. H. Gilman	263 89	
A. W. Russell	4 36	
C. Schenck	2 36	
G. E. Thornton	39	
R. Washington	2 29	
C. P. Wallach	2 03	
		278 17
		3,853 42
Hydrographic work, 1881 and prior years:		
By R. Washington	$0 90	
Hydrographic work, 1882:		
To R. Washington		2,838 00
Deduct repayment:		
By R. Washington		100 20
		2,737 80
Hydrographic work, 1883:		
To adjustment of appropriation		850 60
T. H. Looker		694 00
Treasurer of United States		300 00
		1,844 60
Deduct repayment:		
By R. Washington		306 56
		1,538 04
Copper plates, Hydrographic Office:		
To T. T. Caswell, pay inspector		7,383 00
A. H. Gilman, pay director		1,652 00
		9,035 00
Deduct repayment:		
By T. T. Caswell		3 90
		9,031 10
Survey of west coast of Mexico, Hydrographic Office:		
To adjustment of appropriation		540 85
T. H. Looker		1,264 00
C. Schenck		49 00
R. Washington		1,000 00
Carried forward		2,853 85

Survey of west coast of Mexico, Hydrographic Office—Continued.		
Deduct repayment:		
Brought forward		$2,853 85
By R. Washington		573 05
		2,280 80
Charts of Pacific coast of Mexico, Hydrographic Office:		
By R. Washington	$2 29	
Naval Observatory 1882:		
By R. Washington	$0 26	
Naval Observatory, 1883:		
To adjustment of appropriation		499 80
R. Washington		71 00
		570 80
Deduct repayments:		
By G. A. Lyons	$8 35	
R. Washington	95	
		9 30
		561 50
Lighting vessels by electricity, 1883:		
To T. T. Caswell		5,000 00
Naval laboratory, Washington, D. C., 1883:		
To T. T. Caswell		24 00
A. W. Russell		24 00
R. Washington		498 00
		546 00
Deduct repayments:		
By T. T. Caswell	$0 95	
A. W. Russell	78	
R. Washington	3 09	
		4 82
		541 18
Observation of the transit of Venus:		
To adjustment of appropriations		16,444 21
J. R. Eastman		42 50
T. H. Looker		3,932 00
S. Newcomb		130 42
D. S. H. Smith		42 91
Seligman Bros		5 35
Edwin Smith		119 96
E. G. Thornton		4 00
Treasurer United States		563 00
R. Washington		467 00
E. Wilder, Treasurer		61 68
		21,813 03
Deduct repayments:		
By T. T. Caswell	$0 50	
Geo. Davidson	517 90	
H. Howe	91	
S. Newcomb	275 64	
A. W. Russell	75	
G. E. Thornton	50	
R. Washington	7,027 50	
		7,823 70
		13,989 33
Velocity of light, Nautical Almanac:		
To T. H. Looker		565 00
Deduct repayment:		
By T. H. Looker		20
		564 80
Ordnance and ordnance stores, 1882:		
To adjustment of appropriation		3,000 00
T. T. Caswell		11,426 00
T. H. Looker		324 00
A. W. Russell		6,030 61
R. Washington		2,412 00
Carried forward		23,192 61

Ordnance and ordnance stores, 1882—Continued.		
Brought forward		$23,192 61
Deduct repayments:		
By adjustment of appropriation	$35 00	
T. T. Caswell	77	
A. W. Russell	1 27	
R. Washington	79	
		37 83
		23,154 78
Ordnance and ordnance stores, 1883:		
To R. W. Allen		149 00
Adjustment of appropriation		2,241 05
Z. T. Brown		34 00
T. T. Caswell		399 00
L. A. Frailey		449 00
James Hoy		3 00
J. Macmahan		398 00
T. H. Looker		140 00
A. W. Russell		462 00
J. M. Roche		34 00
C. Schenck		40 00
Seligman Bros		454 29
G. E. Thornton		20 00
R. Washington		1,636 00
C. P. Wallach		12 00
		6,471 34
Deduct repayments:		
By R. W. Allen	$2 82	
Adjustment of appropriation	4 61	
Z. T. Brown	25	
T. T. Caswell	573 99	
L. A. Frailey	38	
G. A. Lyon	335 60	
T. H. Looker	87	
J. Macmahon	1 11	
Navy Department	64 26	
A. W. Russell	2 75	
J. M. Roche	40	
H. T. Skelding	10 69	
J. H. Stevenson	12	
G. E. Thornton	10	
J. F. Tarbell	3 28	
C. P. Wallach	1 35	
R. Washington	10 92	
		1,013 50
		5,457 84
Ordnance and ordnance stores, 1884:		
To R. W. Allen		5,470 00
C. W. Abbot		9,351 00
Adjustment of appropriation		2,555 91
Z. T. Brown		80 00
T. T. Caswell		19,093 00
H. G. Colby		888 00
C. H. Eldredge		3,651 00
L. A. Frailey		5,118 25
A. H. Gilman		7 00
James Hoy		55,000 00
J. W. Jordan		75 00
T. H. Looker		6,104 00
J. Macmahon		2,577 00
Navy Department		2,065 68
A. Peterson		240 00
J. B. Redfield		8,894 00
A. W. Russell		1,199 00
J. M. Roche		160 00
H. T. Skelding		4,104 20
J. H. Stevenson		12,150 00
C. Schenck		1,407 00
J. F. Tarbell		6,344 40
G. E. Thornton		171 00
R. Washington		4,889 00
C. P. Wallack		790 00
Carried forward		152,384 44

Ordnance and ordnance stores, 1884—Continued.		
Brought forward		$152,384 44
Deduct repayments:		
By adjustment of appropriation	$81 40	
C. W. Abbot	1 18	
T. T. Caswell	676 68	
C. H. Eldredge	67 67	
H. A. Gill	43 96	
James Hoy	4 20	
T. H. Looker	6 48	
J. Macmahon	257 74	
Navy Department	694 18	
A. W. Russell	2 04	
J. B. Redfield	119 37	
H. T. Skelding	174 35	
C. Schenck	13 20	
J. H. Stevenson	151 51	
M. Sicard	6,949 29	
G. E. Thornton	98	
J. T. Tarbell	42 28	
R. Washington	1 46	
C. P. Wallach	6 55	
		9,294 32
		143,090 12
Contingent, ordnance 1883:		
To R. W. Allen		66 00
Adjustment of appropriation		227 14
Baltimore and Ohio Railroad		82 64
T. T. Caswell		247 00
F. W. Beer		5 55
A. H. Gilman		65 38
A. W. Russell		5 00
C. Schenck		11 00
G. E. Thornton		18 00
Union Pacific R. R		13 70
R. Washington		147 00
C. P. Wallach		2 00
		890 41
Deduct repayments:		
By R. W. Allen	$0 87	
Adjustment of appropriation	2 00	
T. T. Caswell	4 40	
Z. T. Brown	5 66	
J. Macmahon	1 91	
A. W. Russel	80	
C. Schenck	21	
G. E. Thornton	2 49	
C. P. Wallach	2 31	
R. Washington	6 77	
		27 42
		862 99
Contingent, ordnance, 1884:		
To R. W. Allen		192 00
C. W. Abbot		215 00
Adjustment of appropriation		252 98
T. T. Caswell		1,207 00
R. Craven		50
J. E. Davidson		17 22
Baltimore & Ohio R. R		78 87
W. H. Frailey		9 38
G. T. Gilbert		1 19
W. G. Ijams		25
H. Kendall		8 33
T. H. Looker		413 00
John Macmahon		80 00
A. W. Russell		64 00
C. Schenck		111 00
W. Scott		1 00
G. E. Thornton		290 00
C. P. Wallach		27 00
R. Washington		49 00
Carried forward		3,017 72

Contingent, ordnance, 1884—Continued.		
Brought forward		$3,017 72
Deduct repayments:		
By C. W. Abbot	$1 92	
T. T. Caswell	4 17	
A. W. Russell	1 87	
C. Schenck	4 60	
G. E. Thornton	99	
R. Washington	2 11	
C. P. Wallach	2 66	
		18 32
		2,999 40
Civil establishment, Bureau of Ordnance:		
By H. G. Colby	$0 37	
J. H. Stevenson	3 96	
		4 33
Civil establishment, Bureau of Ordnance, 1884:		
To H. G. Colby		236 00
C. H. Eldredge		349 04
L. A. Frailey		936 00
James Hoy		1,500 00
J. Macmahon		225 00
J. B. Redfield		698 00
J. H. Stevenson		1,059 00
		5,003 04
Deduct repayment:		
By J. H. Stevenson		8 04
		4,995 00
Repairs, Bureau of Ordnance, 1883:		
To R. W. Allen		$725 00
Adjustment of appropriation		475 00
T. T. Caswell		2,813 00
J. Macmahon		1 00
A. W. Russell		25 00
J. H. Stevenson		60 00
G. E. Thornton		74 00
R. Washington		10 00
		4,183 00
Deduct repayments:		
By R. W. Allen	$7 97	
H. G. Colby	224 82	
T. T. Caswell	92	
L. A. Frailey	05	
J. Macmahon	30	
A. W. Russell	50	
C. Schenck	50	
H. T. Skelding	9 70	
G. E. Thornton	1 56	
J. F. Tarbell	18	
C. P. Wallach	25	
R. Washington	1 80	
		248 55
		3,934 45
Repairs, Bureau of Ordnance, 1884:		
To R. W. Allen		698 00
C. W. Abbot		178 00
T. T. Caswell]		173 00
C. H. Eldredge		150 00
L. A. Frailey		943 00
James Hoy		10,700 00
T. H. Looker		661 00
C. Schenck		117 00
C. P. Wallach		411 00
R. Washington		15 00
		14,046 00
Deduct repayments:		
By C. W. Abbot	$0 84	
Adjustment of appropriation	475 00	
Carried forward	475 84	14,046 00

Repairs, Bureau of Ordnance, 1884—Continued.		
Deduct repayments:		
Brought forward	$475 84	$14,046 00
By T. T. Caswell	1 50	
C. Schenck	1 06	
C. P. Wallach	2 26	
		480 66
		13,565 34
Torpedo Corps, 1882:		
To adjustment of appropriation		10 66
S. Rand		2,407 00
Seligman Bros		1,690 99
		4,108 65
Deduct repayments:		
By adjustment of appropriation	$2 84	
T. T. Caswell	22	
		3 06
		4,105 59
Torpedo Corps, 1883:		
To adjustment of appropriation		19,822 17
T. T. Caswell		227 00
S. Rand		7,981 00
Seligman Bros		247 77
		28,277 94
Deduct repayments:		
By T. T. Caswell	$2 77	
L. A. Frailey	64	
G. A. Lyon	150 27	
		153 68
		28,124 26
Torpedo Corps, 1884:		
To C. W. Abbot		4 00
Adjustment of appropriation		1,432 34
T. T. Caswell		2,943 00
James Hoy		500 00
T. H. Looker		2 00
L. A. Frailey		300 00
S. Rand		40,427 00
A. W. Russell		1 00
H. T. Skelding		75 00
C. P. Wallach		9 00
		45,693 34
Deduct repayments:		
By T. T. Caswell	$3 05	
C. W. Abbot	80	
		3 85
		45,689 49
New propeller for U. S. S. Alarm:		
By G. A. Lyon	$652 40	
Sale of small-arms:		
To T. T. Caswell		8,480 00
G. E. Thornton		242 00
R. Washington		78 00
		8,800 00
Deduct repayments:		
By T. T. Caswell	$3 90	
R. Washington	2 44	
		6 34
		8,793 66
Testing Clark's deflective turrets:		
To A. H. Gilman		10,373 00
Deduct repayment:		
By G. A. Lyon		61 50
		10,311 50

1883–'84. NAVAL ESTABLISHMENT.

Steel rifled breech-loading guns, 1883:		
To A. W. Russell		$50 68
R. Washington		638 64
		889 32
Deduct repayments:		
By T. T. Caswell	$0 03	
G. A. Lyon	10 05	
A. W. Russell	1 31	
R. Washington	3 83	
		15 22
		674 10
Steel rifled breech-loading guns, 1884:		
To R. W. Allen		5,240 00
C. W. Abbot		4 00
T. T. Caswell		6,679 00
James Hoy		15,000 00
T. H. Looker		1,249 00
J. Macmahon		57 00
A. W. Russell		2,232 00
R. Washington		228 00
		30,689 00
Deduct repayments:		
By C. W. Abbot	$0 85	
T. T. Caswell	2 81	
A. W. Russell	1 59	
R. Washington	35	
		5 60
		30,683 40
Steel cruisers:		
To C. W. Abbot		10,715 00
T. T. Caswell		874,207 97
C. H. Eldredge		9,869 00
L. A. Frailey		769 00
A. H. Gilman		221,667 00
James Hoy		39,786 00
J. W. Jordan		17 00
T. H. Looker		94,714 00
James Macmahon		2,890 00
Navy Department		3,577 99
A. J. Pritchard		273 00
A. W. Russell		11,469 60
J. H. Stevenson		500 00
H. T. Skelding		3,163 00
J. F. Tarbell		11,020 00
G. E. Thornton		245 00
R. Washington		241 00
		1,285,124 56
Deduct repayments:		
By T. T. Caswell	$6,702 58	
G. A. Lyon	50	
A. J. Pritchard	22	
A. W. Russell	3 78	
J. H. Stevenson	69 05	
R. Washington	1 39	
		6,777 52
		1,278,347 04
Equipment of vessels, 1882:		
To adjustment of appropriation		1,472 63
R. Washington		13 00
		1,485 63
Deduct repayment:		
By R. Washington		40
		1,485 23
Equipment of vessels, 1883:		
To R. W. Allen		71 00
Adjustment of appropriation		2,492 30
Z. T. Brown		8 00
C. S. Bradley		510 00
T. T. Caswell		3,495 00
Carried forward		6,576 30

Equipment of vessels, 1883—Cont'd.		
Brought forward		$6,576 30
To L. P. Green		75 00
A. W. Russell		164 00
C. Schenck		1 00
D. A. McKinley		219 55
G. E. Thornton		111 00
J. Voxicd		75 00
C. P. Wallach		466 00
R. Washington		4,218 00
		11,905 85
Deduct repayments:		
By R. W. Allen	$0 28	
Z. T. Brown	57	
T. T. Caswell	107 95	
H. G. Colby	64	
L. A. Frailey	1,543 32	
H. A. Gill	432 25	
T. J. Hobbs	46 40	
W. B. Morgan	853 77	
J. Macmahon	5 53	
G. A. Lyon	250 46	
A. W. Russell	2 02	
C. Schenck	80	
H. T. Skelding	15 94	
J. H. Stevenson	212 35	
J. T. Tarbell	33 07	
G. E. Thornton	2 87	
C. P. Wallach	2 45	
R. Washington	21 68	
		3,532 35
		8,373 50
Equipment of vessels, 1884:		
To C. W. Abbot		21,155 00
Adjustment of appropriation		248,688 24
R. W. Allen		242 00
Z. T. Brown		500 00
H. G. Colby		2,500 00
T. T. Caswell		132,218 00
C. H. Eldredge		8,500 00
L. H. Frailey		20,063 00
L. P. Green		225 00
A. H. Gilman		13,537 00
James Hoy		51,550 00
M. Hunkin		306 00
J. W. Jordan		1,033 00
T. H. Looker		19,152 00
John Macmahon		22,245 00
D. A. McKinley		279 15
Navy Department		108 63
A. Peterson		600 00
A. W. Russell		21,778 00
J. B. Redfield		31,371 00
J. M. Roche		1,000 00
S. Rand		2,152 00
H. T. Skelding		13,096 00
J. H. Stevenson		42,500 00
C. Schenck		6,264 00
J. F. Tarbell		41,760 00
G. E. Thornton		36,117 00
E. S. Stout, dec'd		52 00
R. Washington		57,676 00
C. P. Wallach		2,839 00
		799,507 02
Deduct repayments:		
By adjustment of appropriation	$348 80	
C. W. Abbot	3 32	
T. T. Caswell	5 05	
H. A. Gill	1,983 28	
James Hoy	11 60	
W. B. Morgan	475 07	
Navy Department	2,020 68	
A. W. Russell	9 64	
C. Schenck	3 78	
J. H. Stevenson	1,524 83	
F. H. Stickney	261 40	
G. E. Thornton	3 98	
Carried forward	6,651 43	799,507 02

Equipment of vessels, 1884—Continued.		
Deduct repayments:		
Brought forward	$6,651 43	$799,507 02
By R. Washington	6 22	
C. P. Wallach	4 96	
		6,662 61
		792,844 41
Transportation and recruiting, Bureau of Equipment and Recruiting, 1884:		
To C. W. Abbot		716 00
Adjustment of appropriation		11,004 50
Z. T. Brown		18 00
T. T. Caswell		8,463 00
D. B. Clarke		50 00
S. W. Cooper		6 00
A. H. Gilman		1,156 00
T. H. Looker		841 00
John Macmahon		21 00
A. W. Russell		1,660 00
S. Rand		22 00
H. T. Skelding		1,515 00
C. Schenck		5,490 00
G. E. Thornton		729 00
R. Washington		1,844 00
C. P. Wallach		996 00
		34,531 50
Deduct repayments:		
By adjustment of appropriation	$107 86	
C. W. Abbot	30	
T. T. Caswell	2 70	
A. W. Russell	4 32	
G. E. Thornton	93 50	
R. Washington	1 85	
C. P. Wallach	3 65	
		214 18
		34,317 32
Tuition of two naval cadets, Royal Naval College, Greenwich:		
To L. Nixon		450 00
J. L. Schock		450 00
		900 00
Contingent, Equipment, and Recruiting, 1879 prior years:		
By R. Washington	$2 64	
Contingent, Equipment and Recruiting, 1883:		
To adjustment of appropriation		746 04
Z. T. Brown		34 00
Baltimore and Ohio R. R		25 52
T. T. Caswell		80 00
A. W. Russell		13 00
C. Schenck		21 00
G. E. Thornton		37 00
R. Washington		2,617 00
		3,573 56
Deduct repayments:		
By Z. T. Brown	$1 20	
T. T. Caswell	2 77	
J. Macmahon	45	
A. W. Russell	93	
J. M. Roche	40	
C. Schenck	70	
H. Skelding	10 00	
G. E. Thornton	62 21	
C. P. Wallach	1 50	
R. Washington	511 14	
		591 30
		2,982 26
Contingent, Equipment and Recruiting, 1884:		
To C. W. Abbot		$71 00
Adjustment of appropriation		3,471 78
C. S. Bradley		104 13
T. T. Caswell		3,307 00
A. H. Gilman		216 00
James Hoy		60 00
L. A. Frily		62 97
T. H. Looker		4,856 00
John Macmahon		82 00
A. W. Russell		56 00
J. M, Roche		34 00
H. C. Swaim		11 88
C. Schenck		185 00
G. E. Thornton		33 00
R. Washington		2,282 00
C. P. Wallach		64 00
		14,896 76
Deduct repayments:		
By C. W. Abbot	$1 09	
adjustment of appropriation	12 25	
T. T. Caswell	4 67	
A. W. Russell	3 79	
C. Schenck	1 61	
G. E. Thornton	35	
R. Washington	3 13	
C. P. Wallach	42	
		27 31
		14,869 45
Transportation of enlisted men, Equipment and Recruiting, 1883:		
To adjustment of appropriation		4,546 90
T. T. Caswell		310 00
J. E. Davidson		15 50
J. C. Peasley		9 04
A. W. Russell		211 00
Union Pacific Rwy		54 50
R. Washington		26 00
		5,172 94
Deduct repayments:		
By adjustment of appropriation	$54 58	
R. W. Allen	75	
T. T. Caswell	1 65	
G. A. Lyon	107 00	
J. Macmahon	25	
A. W. Russell	1 30	
C. Schenck	2,646 50	
G. E. Thornton	44 55	
C. P. Wallach	175 25	
		3,031 83
		2,141 11
Civil establishment, Equipment and Recruiting, 1883:		
By Z. T. Brown	$43 35	
H. G. Colby	76	
L. A. Frailey	10	
G. A. Lyon	23	
J. Macmahon	88	
H. T. Skelding	15	
J. H. Stevenson	40	
J. F. Tarbell	52	
		46 39
Civil establishment, Equipment and Recruiting, 1884:		
To A. E. Barbour		35 61
H. G. Colby		111 00
C. H. Eldredge		349 04
L. A. Frailey		1,201 00
J. Hoy		1,400 00
John Macmahon		1,300 00
J. B. Redfield		939 68
Carried forward		5,336 33

1883–'84. NAVAL ESTABLISHMENT.

Civil establishment, Equipment and Recruiting, 1884—Continued.		
Brought forward		$5,336 33
To H. T. Skelding		1,200 00
J. H. Stevenson		1,055 00
J. F. Tarbell		1,300 00
		8,891 33
Deduct repayment:		
By J. H. Stevenson	7 89	
		8,883 44
Recruiting, Equipment and Recruiting, 1883:		
To adjustment of appropriation		119 85
A. W. Russell		28 00
		147 85
Deduct repayments:		
By A. W. Russell	$1 13	
H. T. Skelding	22 70	
G. E. Thornton	75 00	
R. Washington	4 40	
	103 23	
		44 62
Maintenance, Yards and Docks, 1882:		
To Union Pacific Rwy		258 24
Maintenance, Yards and Docks, 1883:		
To adjustment of appropriation		3 99
Z. T. Brown		438 00
T. T. Caswell		2,199 00
J. Macmahon		174 00
A. W. Russell		214 00
C. Schenck		1,292 00
J. H. Stevenson		343 00
G. E. Thornton		1,541 00
R. Washington		813 00
C. P. Wallach		434 00
		7,451 99
Deduct repayments:		
By Z. T. Brown	$4 73	
T. T. Caswell	3 99	
L. A. Frailey	1 99	
G. A. Lyon	07	
J. Macmahon	1 05	
A. W. Russell	1 98	
C. Schenck	3 42	
H. D. Skelding	92 39	
J. H. Stevenson	12 75	
G. E. Thornton	97	
J. F. Tarbell	12	
C. P. Wallach	2 56	
R. Washington	3 28	
	129 30	
		7,322 69
Maintenance, Yards and Docks, 1884:		
To C. W. Abbot		4,773 00
Adjustment of appropriation		1,006 33
Z. T. Brown		2,000 00
P. Banagan		14 56
H. G. Colby		2,100 00
T. T. Caswell		16,201 00
C. H. Eldredge		7,500 00
L. A. Frailey		23,000 00
A. H. Gilman		450 00
James Hoy		17,675 00
J. W. Jordan		1,460 00
D. Johnson, deceased		3 00
T. H. Looker		3,587 00
John Macmahon		26,859 00
A. W. Russell		2,780 00
S. Rand		1,357 00
J. B. Redfield		21,356 00
J. M. Roche		2,621 00
J. H. Stevenson		27,100 00
Carried forward		161,842 89

Maintenance, Yards and Docks, 1884—Continued.		
Brought forward		$161,842 89
To H. T. Skelding		4,200 00
C. Schenck		11,877 00
C. H. Sturtevant		1 76
G. E. Thornton		2,617 00
J. F. Tarbell		9,495 00
C. P. Wallach		6,893 00
R. Washington		424 00
		197,350 65
Deduct repayments:		
By adjustment of appropriation	$1,032 46	
C. W. Abbott	1 78	
T. T. Caswell	9 98	
Navy Department	214 24	
A. W. Russell	7 79	
J. M. Roche	1 46	
C. Schenck	2 59	
J. H. Stevenson	172 66	
G. E. Thornton	1 62	
R. Washington	83	
C. P. Washington	9 19	
	1,454 60	
		195,896 05
Maintenance, Yard and Docks, 1883–1884:		
To adjustment of appropriation		8 35
Deduct from repayments:		
By adjustment of appropriation	$7 64	
T. T. Caswell	1 46	
C. Schenck	49	
J. H. Stevenson	24	
A. W. Russell	1 79	
G. E. Thornton	31	
R. Washington	1 90	
C. P. Wallach	95	
	14 78	
Excess of repayments		6 43
Contingent, Yards and Docks, 1883:		
To T. T. Caswell		3,984 00
R. Washington		3,466 00
C. P. Wallach		2,208 00
		9,658 00
Deduct repayments:		
By H. G. Colby	$224 94	
T. T. Caswell	1 25	
L. A. Frailey	1,550 07	
C. Schenck	06	
C. P. Wallach	2 36	
R. Washington	84	
	1,779 52	
		7,878 48
Contingent, Yards and Docks, 1884.		
To adjustment of appropriation		85 66
C. W. Abbot		525 00
H. G. Colby		500 00
T. T. Caswell		1,299 00
T. D. Hoxsey		375 00
J. P. Loomis		125 00
J. B. Redfield		3,000 00
H. T. Skelding		2,000 00
J. F. Tarbell		2,254 00
C. P. Wallach		1,155 00
		11,318 66
Deduct repayments:		
By adjustment of appropriation	$81 00	
T. T. Caswell	43	
	81 43	
		11,237 23

1883–'84. NAVAL ESTABLISHMENT.

Civil establishment, Yards and Docks, 1883:
By L. A. Frailey $19 32
J. Macmahon..... 04
19 36

Civil establishment, Yards and Docks, 1884:
To adjustment of appropriation. $81 00
Z. T. Brown 270 00
H. G. Colby 681 00
C. H. Eldredge 1,180 38
L. A. Frailey..... 3,594 00
James Hoy 2,700 00
John Macmahon 2,934 00
A. Peterson..... 468 00
J. M. Roche 312 00
J. B. Redfield 2,987 62
J. H. Stevenson 3,555 00
H. T. Skelding 2,695 14
J. F. Tarbell 2,700 00
24,158 14
Deduct repayments:
By adjustment of appropriation $158 47
J. H. Stevenson 89
159 36
23,998 78

Naval station and coal depot, Port Royal, S. C.:
To T. H. Looker..... 500 00

Site for naval station and coal depot, Port Royal, S. C.:
To J. E. Janett 5,000 00

Naval training station Coaster's Island Harbor, R. I., 1884:
To C. W. Abbot..... $33 00
Adjustment of appropriation. 84 00
T. T. Caswell..... 208 00
John Furey..... 38,267 00
A. H. Gilman..... 44 00
F. H. Looker 332 00
A. W. Russell 46 00
G. E. Thornton..... 22 00
39,036 00
Deduct repayments:
By C. W. Abbot..... $1 46
Adjustment of appropriation 84 00
T. H. Looker 200 70
A. W. Russell 40
286 56
38,749 44

Naval training station Coaster's Island Harbor, R. I., 1883:
To John Furey 195 00

Navy-yard, Brooklyn, N. Y., 1883:
To T. T. Caswell..... 47,508 00
J. H. Stevenson 3,304 00
50,812 00
Deduct repayments:
By T. T. Caswell..... $1 95
J. H. Stevenson 38 10
R. Washington..... 98
41 03
50,770 97

Navy-yard, Brooklyn, N. Y., 1884:
To T. T. Caswell..... 27,723 00
C. H. Eldredge 698 00
A. H. Gilman..... 22,875 97
J. H. Stevenson 1,344 00
Carried forward..... 52,640 97

Navy-yard, Brooklyn, N. Y., 1884—Continued.
Brought forward..... $52,640 97
Deduct repayments:
By T. T. Caswell..... $2 53
J. H. Stevenson 44
2 97
52,638 00

Navy-yard, Washington, D. C., 1883:
To James Hoy..... 2,000 00
T. H. Looker 2,724 00
R. Washington..... 1,558 00
6,282 00
Deduct repayments:
By G. A. Lyon $422 48
T. H. Looker 501 08
R. Washington..... 4 33
927 89
5,354 11

Navy-yard, Washington, D. C., 1884:
To James Hoy..... 7,673 00
T. H. Looker 1,911 00
9,584 00

Navy-yard, Mare Island, California, 1883:
To H. G. Colby..... 1,243 00
J. B. Redfield 2,500 00
C. Schenck 42,926 50
46,669 50
Deduct repayments:
By H. G. Colby $954 68
C. Schenck..... 6 75
961 43
45,708 07

Navy-yard, Mare Island, California, 1884:
To H. G. Colby..... 12,000 00
T. T. Caswell..... 255 00
J. B. Redfield..... 133,059 00
C. Schenck..... 69,619 62
214,933 62
Deduct repayment:
By C. Schenck..... 7 48
214,926 14

Navy-yard, Pensacola, 1881 and prior years:
By Z. T. Brown $94 64

Navy-yard, Pensacola, Fla., 1882:
To Z. T. Brown 721 00
Deduct from repayment:
By adjustment of appropriation 1,025 58
Excess of repayment..... 304 58

Naval wharf, Key West, Fla.:
To T. T. Caswell 3,012 00
Deduct repayment:
By T. T. Caswell..... 57
3,011 43

Navy-yard, New London, 1881 and prior years:
By S. Rand $112 70

1883–'84. NAVAL ESTABLISHMENT.

Closed navy-yards and stations, 1884:		
To C. W. Abbot		$281 00
Adjustment of appropriation		134 96
Z. T. Brown		481 00
A. Peterson		7,764 00
S. Rand		2,759 75
A. W. Russell		1,275 00
J. M. Roche		3,785 00
H. T. Skelding		12,150 00
J. F. Tarbell		18,725 00
G. E. Thornton		2,993 00
		50,348 71
Deduct repayments:		
By adjustment of appropriation	$442 00	
C. W. Abbot	64	
A. W. Russell	5 39	
G. E. Thornton	1 29	
		440 32
		49,899 39
Naval Asylum, Philadelphia, Pa., 1883:		
To A. W. Russell		12,275 00
Deduct repayments:		
By G. W. Beaman	$11 09	
A. W. Russell	5 80	
		16 89
		12,258 11
Naval Asylum, Philadelphia, Pa., 1884:		
To G. W. Beaman		2,100 00
Joseph Foster		9,400 00
A. W. Russell		34,373 00
H. T. Skelding		1,100 00
R. Washington		6 00
		46,979 00
Deduct from repayments:		
By G. W. Beaman	$14 50	
Navy Department	59,813 00	
A. W. Russell	9 58	
		59,837 08
Excess of repayments:		12,858 08
Repairs and preservation of navy-yards, 1883:		
To Z. T. Brown		191 00
T. T. Caswell		2,971 00
John Macmahon		87 00
J. H. Stevenson		377 00
R. Washington		1,672 00
		5,298 00
Deduct repayments:		
By Z. T. Brown	$9 82	
T. T. Caswell	4 49	
L. A. Frailey	14 84	
G. A. Lyon	23	
J. Macmahon	27	
A. W. Russell	49	
J. H. Stevenson	7 47	
G. E. Thornton	1 10	
J. F. Tarbell	1 78	
C. P. Wallach	87	
R. Washington	4 19	
S. Rand	38	
		45 91
		5,252 09
Repairs and preservation of navy-yards, 1884:		
To H. G. Colby		1,500 00
T. T. Caswell		12,679 00
C. H. Eldredge		7,967 00
L. A. Frailey		31,600 00
Carried forward		53,748 00

Repairs and preservation of navy-yards, 1884—Continued.		
Brought forward		$53,746 00
To A. H. Gilman		5,010 00
James Hoy		12,404 00
J. W. Jordan		2,197 00
T. H. Looker		2,213 00
J. Macmahon		20,299 00
Navy Department		45 00
J. B. Redfield		17,388 00
A. W. Russell		1,208 00
J. H. Stevenson		13,600 00
C. Schenck		6,137 00
C. P. Wallach		7,307 00
R. Washington		1,748 00
		143,302 00
Deduct repayments:		
By T. T. Caswell	$7 02	
C. Schenck	4 38	
J. H. Stevenson	443 84	
R. Washington	05	
C. P. Wallach	2 89	
		458 18
		142,843 82
Enlistment bounties to seamen prior to July 1, 1879:		
To T. H. Looker		66 67
Deduct repayment:		
By R. Washington		66 16
		51
Enlistment bounties to seamen prior to July 1, 1880:		
To T. H. Looker		33 34
Deduct repayment:		
By R. Washington		33 34
Medical Department, 1882:		
To adjustment of appropriation		330 37
Deduct repayment:		
By R. Washington		105 57
		224 80
Medical Department, 1883:		
To R. W. Allen		43 22
Adjustment of appropriation		3,291 89
C. W. Abbot		57 00
Z. T. Brown		34 00
T. T. Caswell		7,137 00
A. W. Russell		31 00
S. Rand		13 70
C. Schenck		53 00
G. E. Thornton		44 00
C. P. Wallach		7 00
R. Washington		46 00
		10,757 81
Deduct repayments:		
By R. W. Allen	$0 72	
C. W. Abbot	30	
Adjustment of appropriation	50 72	
Z. T. Brown	35 25	
T. T. Caswell	740 34	
Navy Department	5,785 25	
A. W. Russell	4 46	
C. Schenck	3 29	
G. E. Thornton	84	
R. Washington	110 75	
		6,731 92
		4,025 89
Medical Department, 1884:		
To R. W. Allen		75 05
C. W. Abbot		806 00
Adjustment of appropriation		8,982 90
T. T. Caswell		4,534 00
Carried forward		14,397 95

1883-'84. NAVAL ESTABLISHMENT.

Medical Department, 1884—Cont'd.		
Brought forward		$14,397 95
To J. T. Ghiselin		25 00
A. H. Gilman		1,420 00
R. E. Impey		9 65
H. E. Jones		100 00
W. James, M. D		25 00
J. W. Jordan		70 17
T. H. Looker		4,400 00
G. R. Lyon		6 00
K. Mackenzie		10 00
J. Macmahon		34 00
Navy Department		45 00
A. W. Nelson		14 00
A. Peterson		957 00
S. Rand		21 40
A. W. Russell		608 00
J. M. Roche		1,527 00
R. G. Rex		150 00
G. B. Ransom		18 60
C. Schenck		244 00
St. Vincent Hospital		249 00
G. E. Thornton		47 00
R. Washington		7,387 00
C. P. Wallach		17 00
		31,782 77
Deduct repayments:		
By adjustment of appropriation	$5,214 88	
C. W. Abbot	19 14	
T. T. Caswell	1 29	
A. W. Russell	2 17	
C. Schenck	3 10	
G. E. Thornton	1 00	
R. Washington	1,676 78	
C. P. Wallach	60	
		6,918 96
		24,863 81
Museum of Hygiene, Medicine, and Surgery, 1883:		
To adjustment of appropriation		39 60
T. T. Caswell		237 00
T. H. Looker		1,640 00
R. Washington		2,000 00
		3,916 60
Deduct repayments:		
By T. T. Caswell	$1 16	
R. Washington	1,696 55	
		1,697 71
		2,218 89
Naval hospital fund, 1882:		
By R. Washington	$110 15	
Naval hospital fund, 1883:		
By Z. T. Brown	$1 46	
T. T. Caswell	1 41	
J. Macmahon	07	
G. E. Thornton	55	
R. Washington	3 04	
	6 53	
Naval hospital fund, 1884:		
To C. W. Abbot		387 00
T. T. Caswell		7,496 00
T. H. Looker		1,808 00
J. Macmahon		602 00
A. W. Russell		4,779 00
J. M. Roche		411 00
J. B. Redfield		100 00
C. Schenck		4,500 00
G. E. Thornton		3,008 00
R. Washington		3,000 00
C. P. Wallach		5,351 00
Carried forward		31,442 00

Naval hospital fund, 1884—Cont'd.		
Brought forward		$31,442 00
Deduct repayments:		
By C. W. Abbot	$1 10	
Adjustment of appropriation	62	
T. T. Caswell	1 71	
A. W. Russell	4 41	
C. Schenck	3 89	
G. E. Thornton	1,255 38	
R. Washington	186 40	
C. P. Wallach	3 77	
		1,457 28
		29,984 72
Naval hospital fund (no year):		
To adjustment of appropriation		6,797 18
C. W. Abbot		4,907 00
Z. T. Brown		328 00
G. E. Benjamin, dec'd		1 21
T. T. Caswell		20,183 00
A. H. Gilman		389 00
J. W. Jordan		2 88
T. H. Looker		5,195 00
J. Macmahon		908 40
Navy Department		11,942 49
A. J. Pritchard		1,540 00
A. Peterson		890 00
A. W. Russell		8,326 00
J. M. Roche		680 00
J. B. Redfield		550 00
C. Schenck		11,726 00
G. E. Thornton		3,689 00
Treasury Department		68 00
R. Washington		7,709 00
C. P. Wallach		7,781 00
J. Worthington		68 90
		93,682 06
Deduct repayments:		
By adjustment of appropriation	$35,716 44	
C. W. Abbot	25	
G. W. Beaman	1,918 66	
T. T. Caswell	209 40	
J. Foster	7,994 89	
F. M. Gunnell	13 40	
A. W. Russell	27 21	
C. Schenck	4 79	
G. E. Thornton	1 37	
C. P. Wallach	2 04	
R. Washington	82 52	
		45,970 97
		47,711 09
Repairs, Bureau of Medicine and Surgery, 1882:		
By R. Washington	$335 13	
Repairs, Bureau of Medicine and Surgery, 1883:		
To T. T. Caswell		1,382 00
A. J. Pritchard		3,400 00
C. Schenck		52 00
G. E. Thornton		48 00
R. Washington		4 00
		4,886 00
Deduct repayments:		
By T. T. Caswell	$315 44	
C. Schenck	80	
G. E. Thornton	1 29	
R. Washington	78 26	
		395 79
		4,490 21
Repairs, Bureau of Medicine and Surgery, 1884:		
To C. W. Abbot		119 00
Adjustment of appropriation		403 84
Carried forward		523 84

Repairs Bureau of Medicine and Surgery, 1884—Continued.		
Brought forward		$523 84
To T. T. Caswell		1,639 00
L. A. Frailey		93 78
T. H. Looker		7,020 00
Navy Department		15 00
A. J. Pritchard		1,328 00
A. W. Russell		1,089 00
J. B. Redfield		98 00
C. Schenck		54 00
G. E. Thornton		111 00
R. Washington		3,510 00
C. P. Wallach		112 00
		15,592 62
Deduct repayments:		
By C. W. Abbot	$0 75	
T. T. Caswell	3 42	
A. W. Russell	34	
C. Schenck	85	
G. E. Thornton	01	
R. Washington	1,140 00	
C. P. Wallach	77	
		1,146 14
		14,446 48
Contingent, Medicine and Surgery, 1882:		
To Secretary of Treasury		89 51
Deduct from repayment:		
By R. Washington		248 07
Excess of repayment		158 56
Contingent, Medicine and Surgery, 1883:		
To adjustment of appropriation		494 21
Z. T. Brown		72 00
T. T. Caswell		128 00
John Macmahon		20 00
A. J. Pritchard		28 00
W. G. Purdy		16 41
A. W. Russell		442 00
C. Schenck		119 00
Secretary of Treasury		21 09
Seligman & Bros		427 26
G. E. Thornton		29 00
R. Washington		277 00
C. P. Wallach		3 00
		2,076 97
Deduct repayments:		
By R. W. Allen	$0 35	
Adjustment of appropriation	40	
Z. T. Brown	3 75	
T. T. Caswell	69 26	
J. Macmahon	1 25	
A. J. Pritchard	25	
A. W. Russell	2 85	
C. Schenck	1 07	
G. E. Thornton	75	
C. P. Wallach	50	
R. Washington	59 08	
		139 51
		1,937 46
Contingent, Medicine and Surgery, 1884:		
To R. W. Allen		5 00
C. W. Abbot		646 00
Adjustment of appropriation		1,467 97
T. T. Caswell		2,970 00
J. E. Davidson		28 93
A. H. Gilman		381 00
T. H. Looker		3,305 00
J. Macmahon		4 00
A. Peterson		102 00
Pennsylvania R. R.		2 20
A. J. Pritchard		8 00
Carried forward		8,920 10

Contingent, Medicine and Surgery, 1884—Continued.		
Brought forward		$8,920 10
To A. W. Russell		1,966 00
J. M. Roche		59 00
C. Schenck		314 00
G. E. Thornton		19 00
R. Washington		3,396 00
C. P. Wallach		471 00
		15,145 10
Deduct repayments:		
By C. W. Abbot	$2 05	
A. W. Russell	5 57	
C. Schenck	1 60	
G. E. Thornton	20	
R. Washington	725 12	
C. P. Wallach	1 25	
		735 79
		14,409 31
Civil establishment, Medicine and Surgery, 1883:		
To R. W. Allen		40 00
Adjustment of appropriation		84 10
G. W. Beaman		188 00
Z. T. Brown		48 00
James Hoy		250 00
		610 10
Deduct repayments		
By R. W. Allen	$40 00	
Adjustment of appropriation	48 00	
G. W. Beaman	188 00	
L. A. Frailey	50	
J. Hoy	250 00	
G. A. Lyon	47 93	
J. Macmahon	1 32	
H. T. Skelding	44	
J. H. Stevenson	99	
		577 18
		32 92
Civil establishment, Medicine and Surgery, 1884:		
To R. W. Allen		460 00
Adjustment of appropriation		416 85
G. W. Beaman		375 00
Z. T. Brown		48 00
H. G. Colby		194 00
C. H. Eldredge		1,450 00
L. A. Frailey		2,878 00
J. Foster		1,739 54
James Hoy		1,968 43
J. Macmahon		461 00
A. Peterson		191 00
J. B. Redfield		2,182 00
J. M. Roche		548 00
J. H. Stevenson		5,110 00
H. T. Skelding		96 00
J. F. Tarbell		1,994 50
		20,112 32
Deduct repayments:		
By Navy Department	$282 00	
J. H. Stevenson	22 72	
		304 72
		19,807 60
Provisions, Navy, 1879 and prior years:		
To T. H. Looker		27 00
Deduct from repayments:		
By T. H. Looker	$0 60	
R. Washington	53 70	
		54 30
Excess of repayments		27 30

1883-'84. NAVAL ESTABLISHMENT.

Provisions, Navy, 1882:		
To adjustment of appropriation..	$1,029 38	
James Bracken	33 90	
A. Dressler, deceased	36 30	
		1,099 58
Deduct repayment:		
By R. Washington	80 90	
		1,018 68
Provisions, Navy, 1883:		
To adjustment of appropriation..	24,153 58	
Z. T. Brown	106 00	
T. T. Caswell	9,673 03	
James Hoy	100 00	
H. W. Leach	16 20	
J. Lauterbach	16 20	
J. Macmahon	281 00	
L. Newcomb	18 60	
A. J. Pritchard	200 00	
A. W. Russell	675 00	
C. Schenck	1,793 00	
G. E. Thornton	1,280 00	
R. Washington	19,824 00	
C. P. Wallach	1,155 00	
		59,291 58
Deduct repayments:		
By adjustment of appropriation	$306 78	
R. W. Allen	205 30	
Z. T. Brown	106 30	
H. G. Colby	89 18	
T. T. Caswell	607 01	
L. A. Frailey	28 67	
James Hoy	53 50	
G. A. Lyon	180 43	
J. Macmahon	4 92	
A. J. Pritchard	121 35	
A. W. Russell	377 49	
C. Schenck	4 61	
H. T. Skelding	196 30	
J. H. Stevenson	258 20	
T. H. Stickney	17 08	
G. E. Thornton	3 38	
J. F. Tarbell	60 88	
C. P. Wallach	2 83	
W. W. Woodhull	56 43	
R. Washington	485 96	
		3,166 60
		56,124 98
Provisions, Navy, 1884:		
To R. W. Allen		20,800 00
C. W. Abbot		7,683 00
Adjustment of appropriation		713,221 46
Z. T. Brown		733 00
G. Bennett		1 50
W. Bailey, deceased		18 00
H. G. Colby		650 00
T. T. Caswell		105,728 00
T. J. Cowie		12,000 00
C. H. Eldredge		6,960 00
J. Foster		2 40
L. A. Frailey		6,691 00
A. H. Gilman		20,708 00
James Hoy		5,350 00
N. M. Hubbard		63 60
J. W. Jordan		5,064 80
T. H. Looker		6,299 00
J. Macmahon		5,798 00
J. E. Mahoney		2 10
A. J. Pritchard		1,300 00
A. Peterson		1,770 00
J. E. Palmer		16 80
A. W. Russell		3,651 00
J. B. Redfield		5,550 00
J. M. Roche		1,579 00
S. Rand		30 77
H. T. Skelding		4,800 00
J. H. Stevenson		32,250 00
Carried forward		968,721 43

Provisions, Navy, 1884—Continued.		
Brought forward		$968,721 43
To C. Schenck		13,313 00
J. F. Tarbell		6,653 00
G. E. Thornton		2,257 00
C. P. Wallach		9,980 00
R. Washington		4,570 00
		1,005,494 43
Deduct repayments:		
By adjustment of appropriation	$527 86	
C. W. Abbot	2 43	
Z. T. Brown	30 00	
Navy Department	150 56	
A. W. Russell	1 56	
S. Rand	30 77	
C. Schenck	5 87	
F. H. Stickney	82 56	
J. H. Stevenson	211 47	
G. E. Thornton	90	
R. Washington	4,360 62	
C. P. Wallach	3 42	
		5,408 02
		1,000,086 41
Clothing, Navy:		
To adjustment of appropriation		9,259 78
T. T. Caswell		139,635 00
J. S. Cunningham		2,000 00
A. H. Gilman		13,882 00
T. H. Looker		3,008 00
G. H. Read		15,000 00
R. Washington		95 00
		182,879 78
Deduct from repayments:		
By adjustment of appropriation	$293,172 21	
R. W. Allen	325 18	
T. T. Caswell	12 79	
H. G. Colby	1,535 42	
J. S. Cunningham	2,162 50	
A. J. Clark	457 66	
L. A. Frailey	2,565 31	
J. B. Redfield	139 37	
G. H. Reed	431 10	
F. H. Stickney	20 01	
J. F. Tarbell	49 55	
R. Washington	99 38	
W. W. Woodhull	12 43	
		300,982 91
Excess of repayments		118,103 13
Small stores, Bureau of Provisions and Clothing:		
To C. W. Abbot		455 00
Adjustment of appropriation		5,229 98
T. T. Caswell		38,746 00
A. H. Gilman		11,264 00
T. H. Looker		1,250 00
A. Russell		45 00
C. Schenck		2,177 00
		59,166 98
Deduct from repayments:		
By adjustment of appropriations	$92,491 55	
A. W. Bacon	3 20	
T. T. Caswell	10 70	
H. G. Colby	30 44	
A. J. Clark	18 05	
L. A. Frailey	34 12	
J. Hoy	1 83	
Navy Department	5 79	
J. B. Redfield	26 20	
C. Schenck	73	
J. F. Tarbell	199 12	
W. W. Woodhull	4 39	
		92,826 17
Excess of repayments		33,659 19

1883–'84. NAVAL ESTABLISHMENT.

Contingent, Provisions and Clothing, 1882:		
To T. T. Caswell	$23 00	
G. E. Thornton	3 00	
		26 00
Deduct repayment:		
By T. T. Caswell	60	
		25 40
Contingent, Provisions and Clothing, 1883:		
To adjustment of appropriation		90 49
Z. T. Brown		73 00
T. T. Caswell		263 00
J. Macmahon		4 00
A. J. Pritchard		16 00
A. W. Russell		116 00
C. Schenck		98 00
G. E. Thornton		11 00
C. P. Wallach		134 00
R. Washington		144 00
		949 49
Deduct repayments:		
By adjustment of appropriation	$75 53	
Z. T. Brown	3 56	
T. T. Caswell	84 79	
J. Macmahon	1 91	
A. J. Pritchard	1 57	
A. W. Russell	15 83	
C. Schenck	3 84	
G. E. Thornton	1 28	
C. P. Wallach	2 74	
R. Washington	419 82	
		610 87
		338 62
Contingent, Provisions and Clothing, 1884:		
To C. W. Abbot		240 00
Adjustment of appropriation		4,900 18
Z. T. Brown		54 00
T. T. Caswell		15,377 00
L. A. Frailey		502 00
A. H. Gilman		2,015 00
J. W. Jordan		537 70
W. H. Injams		1 62
T. H. Looker		970 00
John Macmahon		248 00
Navy Department		45 00
A. J. Pritchard		80 00
A. Peterson		70 00
A. W. Russell		380 00
J. M. Roche		68 00
S. Rand		30 77
C. Schenck		381 00
G. E. Thornton		470 00
C. P. Wallach		186 00
R. Washington		4,646 00
		31,202 27
Deduct repayments:		
By C. W. Abbot	$2 08	
Adjustment of appropriation	194 28	
Z. T. Brown	54 00	
L. A. Frailey	502 00	
A. W. Russell	1 44	
C. Schenck	4 24	
G. E. Thornton	1 16	
R. Washington	1 26	
C. P. Wallach	2 43	
		762 89
		30,439 38
Civil establishment, Provisions and Clothing, 1883:		
By L. A. Frailey	06	
J. F. Tarbell	20 00	
		20 06

Civil establishment, Provisions and Clothing, 1884:		
To L. A. Frailey		$2,034 50
James Hoy		1,300 00
H. T. Skelding		1,017 25
J. F. Tarbell		1,648 25
		6,000 00
Construction and Repair, 1881:		
By A. W. Russell	$0 25	
Construction and Repair, 1882:		
By H. G. Colby	$0 60	
J. Macmahon	50	
		1 10
Construction and Repair, 1883:		
To adjustment of appropriation		7,312 73
C. W. Abbot		11 00
Z. T. Brown		34 00
T. T. Caswell		14,518 65
L. A. Frailey		509 00
James Hoy		278 00
J. P. Loomis		13,525 00
John Macmahon		4,850 00
A. W. Russell		5,472 00
S. Rand		250 00
C. Schenck		9,299 00
Seligman Bros		228 60
G. E. Thornton		16,909 00
C. P. Wallach		1,204 00
R. Washington		813 00
		75,213 98
Deduct repayments:		
By adjustment of appropriation	$3,000 00	
Z. T. Brown	1 78	
T. T. Caswell	48 17	
H. G. Colby	10 11	
L. A. Frailey	74 15	
T. J. Hobbs	419 20	
G. A. Lyon	318 79	
J. Macmahon	1 75	
Navy Department	452 75	
A. W. Russell	6 01	
C. Schenck	3 28	
H. T. Skelding	296 52	
J. H. Stevenson	3,003 72	
G. E. Thornton	7 32	
J. F. Tarbell	93 93	
C. P. Wallach	32 05	
R. Washington	112 95	
		7,882 48
		67,331 50
Construction and Repair, 1884:		
To C. W. Abbot		11,438 00
Adjustment of appropriations		58,194 38
Z. T. Brown		1,000 00
H. G. Colby		20,000 00
T. T. Caswell		48,394 00
C. H. Eldredge		26,768 00
L. A. Frailey		154,131 00
John Furey		593 00
A. H. Gilman		4,824 00
James Hoy		50,599 00
E. Holland		18 75
T. D. Haxey		1,600 00
J. W. Jordan		536 00
T. H. Looker		10,979 00
John Macmahon		181,409 00
Navy Department		55 75
A. Peterson		2,228 00
S. Rand		3,383 00
A. W. Russell		13,244 00
J. B. Redfield		232,436 00
J. M. Roche		1,534 00
H. T. Skelding		154,200 00
J. H. Stevenson		191,000 00
Carried forward		1,168,564 88

1883–'84. NAVAL ESTABLISHMENT.

Construction and Repair, 1884—Continued.		
Brought forward	$1,168,564 88	
To C. Schenck	23,389 00	
T. J. Sundguist	10 00	
J. F. Tarbell	103,378 00	
G. E. Thornton	2,199 00	
R. Washington	4,719 00	
C. P. Wallach	12,460 00	
		1,314,719 88
Deduct repayments:		
C. W. Abbot	$3 81	
Adjustment of appropriations	3,672 33	
T. T. Caswell	11 43	
H. A. Gill	493 29	
James Hoy	47 88	
T. J. Hobbs	20 04	
Navy Department	18,535 40	
A. W. Russell	10 42	
C. Schenck	5 19	
J. H. Stevenson	3,268 35	
G. E. Thornton	2 24	
J. F. Tarbell	2,639 98	
C. P. Wallach	34 58	
R. Washington	1 63	
		28,746 57
		1,285,973 31
Civil establishment, Construction and Repair, 1883:		
By L. A. Frailey	$0 59	
G. A. Lyon	05	
J. Macmahon	31	
H. T. Skelding	54	
		1 49
Civil establishment, Construction and Repair, 1884:		
To H. G. Colby		230 00
C. H. Eldredge		674 00
L. A. Frailey		2,705 00
James Hoy		1,400 00
John Macmahon		2,700 00
J. B. Redfield		2,479 00
H. T. Skelding		2,700 00
J. H. Stevenson		2,027 00
J. F. Tarbell		2,109 00
		17,024 00
Deduct repayment:		
By J. H. Stevenson		15
		17,023 85
Steam machinery, 1882:		
To T. H. Looker		129 05
Secretary of Treasury		221 71
		350 76
Deduct from repayments:		
By adjustment of appropriations	$35 00	
R. Washington	1,350 76	
		1,385 76
Excess of repayments		1,035 00
Steam machinery, 1883:		
To adjustment of appropriations		7,732 54
C. W. Abbot		10 00
Z. T. Brown		77 00
T. T. Caswell		28,863 00
T. H. Looker		39,955 00
J. Macmahon		20 00
M. Morrow, deceased		21 12
S. Rand		40 00
A. W. Russell		77 00
J. M. Roche		248 00
C. Schenck		796 00
Carried forward		77,839 66

Steam machinery, 1883—Continued.		
Brought forward		$77,839 66
To G. E. Thornton		429 00
Secretary of the Treasury		3,611 79
R. Washington		34,710 00
C. P. Wallach		1,400 00
		117,990 45
Deduct repayments:		
By adjustment of appropriations	$11 12	
T. T. Caswell	6 92	
H. G. Colby	24 31	
O. V. Cole	74 30	
L. A. Frailey	21 29	
T. J. Hobbs	343 81	
G. A. Lyon	1,998 67	
T. H. Looker	58	
J. Macmahon	161 44	
Navy Department	254 21	
A. W. Russell	2 17	
J. M. Roche	1 00	
C. Schenck	2 58	
H. T. Skelding	3 14	
J. H. Stevenson	50 15	
G. E. Thornton	13 27	
J. F. Tarbell	15 37	
C. P. Wallach	4 07	
R. Washington	8 90	
		2,997 30
		114,993 15
Steam machinery, 1884:		
To C. W. Abbot		11,628 00
Adjustment of appropriations.		72,125 07
R. W. Allen		349 13
Z. T. Brown		600 00
H. G. Colby		11,000 00
T. T. Caswell		101,066 00
J. E. Davidson		55 77
C. H. Eldredge		49,105 00
L. A. Frailey		66,700 00
A. H. Gilman		21,552 00
James Hoy		96,000 00
J. W. Jordan		960 78
T. H. Looker		54,402 00
John Macmahon		72,930 00
Navy Department		137 72
A. Peterson		2,275 00
S. Rand		825 93
A. W. Russell		15,415 00
J. B. Redfield		127,500 00
J. M. Roche		1,200 00
H. T. Skelding		68,094 00
J. H. Stevenson		114,900 00
C. Schenck		11,342 00
J. F. Tarbell		35,000 00
G. E. Thornton		5,828 00
Treasury Department		1,416 12
R. Washington		36,854 00
C. P. Wallach		22,679 00
		1,008,940 52
Deduct repayments:		
By adjustment of appropriations	$309 01	
C. W. Abbot	6 45	
T. T. Caswell	23 69	
O. V. Cole	206 85	
H. A. Gill	540 79	
J. Hoy	19 29	
Navy Department	53,307 66	
A. W. Russell	11 05	
C. Schenck	6 95	
J. H. Stevenson	2,105 08	
G. E. Thornton	439 68	
R. Washington	2,173 73	
C. P. Wallach	4 25	
		59,154 48
		949,786 04

1883–'84. NAVAL ESTABLISHMENT.

Contingent, Steam Engineering, 1884:		
To R. Washington		505 75
Civil establishment Steam Engineering, 1883:		
By H. G. Colby	$0 74	
L. A. Frailey	28	
J. Macmahon	3 30	
H. T. Skelding	22	
J. H. Stevenson	82	
J. F. Tarbell	1 08	
	6 44	
Civil establishment Steam Engineering, 1884:		
To H. G. Colby		353 00
C. H. Eldredge		349 04
L. A. Frailey		1,300 00
James Hoy		1,300 00
John Macmahon		1,200 00
B. F. Pierce		8 00
G. W. Pierce		8 00
J. W. Pierce		16 00
J. B. Redfield		1,047 00
H Stickney		1,200 00
J. H. Stevenson		706 00
C. Schenck		353 00
J. F. Tarbell		1,200 00
		9,040 04
Deduct repayment:		
By J. H. Stevenson		8 04
		9,032 00
Prize money to captors:		
To C. W. Abbot		500 00
Adjustment of appropriations		23 56
Thomas Cooper		1 26
W. Cowling		257 14
L. Doren		4 92
Arthur Hall		58 44
J. Hayden, deceased		73 97
H. Hoffman, deceased		7 99
J. M. Kelly		27 68
T. H. Looker		2,000 00
Jackson Kingsler		169 56
A. W. Russell		500 00
H. T. Robinson		26 94
W. Ryan		12 80
W. Stolebury		6,368 00
C. Schenck		84 62
W. Tiddeman		95 32
W. H. Wills & Co		63 25
		10,275 45
Deduct repayments:		
By J. Hayden	$73 97	
G. E. Thornton	482 56	
R. Washington	2,615 28	
		3,171 81
		7,103 64
Double-turreted monitors:		
To C. W. Abbot		128 00
T. T. Caswell		76,548 68
C. H. Eldredge		7,848 00
A. H. Gilman		11,711 00
A. J. Pritchard		262 00
A. W. Russell		22,327 50
J. H. Stevenson		3,000 00
H. T. Skelding		43 00
G. E. Thornton		119 00
		121,987 18
Deduct repayments:		
By T. T. Caswell	$5 87	
A. J. Pritchard	1 54	
A. W. Russell	1 72	
J. H. Stevenson	347 38	
Carried forward	356 51	121,987 18

Double-turreted monitors—Cont'd.		
Deduct repayments:		
Brought forward	$356 51	$121,987 18
By G. E. Thornton	37	
R. Washington	60	
		357 48
		121,629 70
Machinery, double-turreted monitors:		
To T. T. Caswell		273,474 19
A. H. Gilman		34,184 17
A. W. Russell		86,963 48
		394,621 84
Deduct repayment:		
By T. T. Caswell		83
		394,621 01
Preservation of cemeteries in foreign countries, 1882:		
To adjustment of appropriations		417 76
J. M. Dean & Sons		31 58
H. Pease		624 75
J. Worthington		15 35
		1,089 44
Navy pension fund:		
To Navy Department		630,000 00
Deduct repayment:		
By Secretary of Navy, trustee		630,000 00
Extra pay of officers and men who served in the Mexican war:		
To J. M. Ball		54 00
T. Davis, deceased		45 00
W. B. Flanigan, deceased		30 00
J. Gomila, deceased		27 00
W. Gillabert		54 00
T. H. Looker		2,000 00
John Lee, deceased		36 00
G. W. Popp, deceased		27 00
L. W. Sloat		250 00
C. Stribling		125 00
C. Spann, deceased		30 00
W. Thomas, deceased		30 00
		2,708 00
Deduct repayment:		
By R. Washington		1,680 00
		1,028 00
Indemnity for lost clothing prior to July 1, 1877:		
To T. H. Looker		58 75
Indemnity for lost clothing:		
To adjustment of appropriations		60 00
R. Barry		60 00
T. T. Caswell		180 00
Ah Foo		60 00
Ah Fung		60 00
M. Franciscovital		60 00
Ah Fat		60 00
W. Gronau, deceased		60 00
Ah Hong		60 00
J. Himicks		60 00
Ah Jack		10 32
Ah Jay		60 00
J. Knott		60 00
C. Kloek		56 86
H. W. Leach		60 00
J. Lauterbach		60 00
Walter Lee, deceased		60 00
T. H. Looker		162 75
J. McCann		60 00
J. Millis		60 00
Thomas McLellan		60 00
John Morris		60 00
Carried forward		$1,489 93

Indemnity for lost clothing—Continued.		
Brought forward		$1,489 93
To E. Mitchell		60 00
Fritz Rachenbach		60 00
St. Leger Crone		60 00
Ah Long		60 00
Ah Sin		60 00
B. Wood, deceased		60 00
		1,849 93
Deduct repayment:		
By R. Washington		420 00
		1,429 93
Gratuity to machinists in lieu of re-enlistment:		
By R. Washington	$811 50	
Bounty for destruction of enemies' vessels prior to July 1, 1878:		
By R. Washington	$71 11	
Bounty for destruction of enemies' vessels prior to July 1, 1879:		
By R. Washington	$55 36	
Bounty for destruction of enemies' vessels prior to July 1, 1880:		
By R. Washington	$17 45	
Bounty for destruction of enemies' vessels:		
By J. Hayden	$8 24	
R. Washington	2,562 86	
		2,571 10
Search for steamer Jeannette, Arctic expedition:		
By adjustment of appropriation	$1,172 77	
Removal and burial of remains of Lieutenant DeLong and companions:		
To adjustment of appropriation		104 76
T. T. Caswell		1,635 00
T. H. Looker		65 00
		1,804 76
Deduct repayment:		
By T. T. Caswell		55
		1,804 21
Payment of Japanese award, act February 22, 1883:		
To adjustment of appropriation		595 30
Peter King		428 62
T. H. Looker		5,000 00
R. Washington		10,000 00
		16,023 92
Deduct repayment:		
By R. Washington		4,322 92
		11,701 00
Payment to captain and owners of North Star for rescue of U. S. S. Rodgers:		
To A. Avery		593 75
C. H. Delameter		1,187 50
James Gammons		593 75
G. S. Horner		1,187 50
S. C. Hart		593 75
W. Lewis		7,718 75
W. Nye, jr		593 75
L. C. Owen		1,000 00
Carried forward		13,468 75

Payment to captain and owners of North Star, for rescue of U. S. S. Rogers—Continued.		
Brought forward		$13,468 75
To G. H. Robinson		1,187 50
A. H. Seabury		2,375 00
W. D. Wilmarth		2,375 00
J. G. Willard		593 75
		20,000 00
Relief of officers and crew of U. S. S. Rodgers:		
To adjustment of appropriation		390 00
T. T. Caswell		15 00
T. H. Looker		30 00
C. Schenck		60 00
		495 00
Deduct repayment:		
By R. Washington		391 68
		103 32
Relief of sufferers by wreck of U. S. S. Huron, act December 14, 1877:		
To D. E. Shea		318 00
Expenses in connection with the Arctic exploring expedition:		
To adjustment of appropriation		560 00
C. C. Willard		353 76
		913 76
Relief of Lady Franklin Bay expedition to the Arctic regions, resolution approved February 13, 1884:		
To C. W. Abbot		1,588 00
Adjustment of appropriation		31,910 58
T. T. Caswell		178,886 16
A. J. Clark		30,000 00
Brown Bros. & Co		750 60
N. A. Elfwing		6,141 80
C. H. Eldredge		54,216 00
A. H. Gilman		11,388 00
James Hoy		1,441 00
T. H. Looker		8,856 82
J. Macmahon		11 00
Navy Department		68,109 68
G. H. Read		25,000 00
S. Rand		4,835 20
A. W. Russell		728 80
Seligman Bros		250,000 00
J. H. Stevenson		34,050 00
J. F. Tarbell		1,650 00
Department of State		729 18
		710,292 82
Deduct repayments:		
By T. T. Caswell	$0 99	
A. J. Clark	4,661 74	
G. H. Read	5,330 29	
J. H. Stevenson	3,659 25	
		13,652 27
		696,640 55
General account of advances:		
To R. W. Allen		71,000 00
Adjustment of appropriation		118 20
W. W. Barry		76,500 00
L. G. Billings		30,000 00
R. T. M. Ball		18,000 00
L. G. Boggs		54,000 00
A. Burtis		55,000 00
E. Bellows		30,000 00
C. S. Bradley		12,295 84
C. C. Carpenter		5,000 00
J. E. Cann		34,000 00
F. H. Clark		26,000 00
T. T. Caswell		150,000 00
Carried forward		561,914 04

General account of advances—Continued.		
Brought forward		$361,914 04
To J. H. Chapman	65,000 00	
J. S. Carpenter	26,000 00	
A. P. Cooke	10,674 13	
H. G. Colby	160,000 00	
H. E. Drury	80,000 00	
J. D. Doyle	67,000 00	
H. M. Denniston	148,200 00	
F. W. Dickins	6,000 00	
H. Erben	20,000 00	
J. Fury	145,000 00	
R. Frazer	41,650 00	
C. F. Guild	105,000 00	
G. H. Griffing	2,500 00	
W. W. Galt	35,000 00	
W. Goldsborough	5,000 00	
A. K. Hughes	11,500 00	
L. Hunt	18,500 00	
G. E. Hendee	60,000 00	
S. L. Heap	26,000 00	
T. D. Hoxsey	35,000 00	
H. T. B. Harris	60,000 00	
A. S. Kenney	165,000 00	
L. C. Kerr	13,800 00	
R. P. Lisle	63,000 00	
J. P. Loomis	23,000 00	
G. A. Lyon	25,000 00	
C. A. McDaniel	61,000 00	
M. C. McDonald	76,078 82	
M. C. McDougal	615 24	
A. H. McCormick	8,000 00	
W. C. McGowan	40,000 00	
C. D. Mansfield	58,080 00	
H. C. Matchett	16,000 00	
A. T. Mahan	5,300 00	
John A. Mudd	5,000 00	
R. Parks	108,697 16	
E. Putnam	50,000 00	
G. H. Read	23,000 00	
C. M. Ray	10,000 00	
E. B. Rogers	12,000 00	
Seligman	1,000,000 00	
H. R. Smith	60,000 00	
J. A. Speel	8,000 00	
E. Stewart	5,000 00	
D. Smith	5,000 00	
D. A. Smith	85,000 00	
H. T. Stancliff	85,000 00	
C. Schenck	49,000 00	
F. H. Swan	50,000 00	
J. R. Stanton	131,000 00	
J. & W. Seligman	1,000,000 00	
J. H. Sands	12,400 00	
G. W. Simpson	5,000 00	
J. H. Stevenson	33,000 00	
Carried forward		4,981,909 39

General account of advances—Continued.		
Brought forward		$4,981,909 39
To W. J. Thompson	115,000 00	
W. J. Thornton	20,000 00	
J. E. Tolfee	180,000 00	
T. S. Thompson	20,000 00	
E. B. Webster	21,500 00	
W. W. Woodhull	85,304 16	
W. A. Watmough	85,000 00	
C. S. Williams	13,000 00	
G. R. Watkins	20,000 00	
W. B. Wilcox	4,000 00	
L. A. Yorke	2,000 00	
		5,547,713 55
Deduct repayments:		
By adjustment of appropriation	$4,904,762 16	
A. W. Bacon	3,946 38	
L. G. Billings	2,478 04	
Geo. Cochran	1,052 94	
R. T. M. Ball	2,473 84	
G. H. Griffing	716 79	
H. T. B. Harris	12 57	
S. L. Heap	2,676 38	
G. E. Hendee	3,978 76	
J. P. Loomis	2,798 25	
G. A. Lyon	3,084 41	
Lewis Bros.	4 36	
Navy Department	1,503 42	
A. Peterson	9 83	
E. Putnam	1,745 33	
J. B. Redfield	3,932 76	
E. B. Rodgers	1,644 67	
G. H. Reed	2,416 83	
J. E. Tolfree	303 63	
W. J. Thomson	19,378 20	
W. W. Williams	189 44	
		4,959,108 99
		588,604 56
Destruction of clothing and bedding for sanitary reasons:		
To adjustment of appropriation		114 64
T. T. Caswell		11 88
John Graham, deceased		5 25
T. H. Looker		146 05
W. A. Malcom		30 69
J. M. Roche		263 60
M. Rush		80 60
T. W. Sheppard, deceased		27 35
		680 06
Navy-yard commissions:		
To adjustment of appropriation		1,225 20

OUTSTANDING WARRANTS, 1884.

Statement of outstanding warrants drawn previous to June 30, 1884, in favor of sundry individuals on the Treasurer of the United States, not placed to the credit of the Treasurer on that day.

TREASURY.

Outstanding liabilities:			
1882—J. C. McDonald		36..	$40 00
S. A. Gordon		37..	41 16
J. Rothery		37..	35 66
J. P. Root		167..	75 00
G. H. Tully		339..	20 53
J. Freeman		339..	24 00
T. Taylor		379..	19 60
C. G. Schimelfing		379..	32 00
W. Mielach		492..	29 20
J. Niolans		492..	31 49
Carried forward			348 64

1883–'84. OUTSTANDING WARRANTS.

TREASURY—continued.

Brought forward		$348 64	
Outstanding liabilities—Continued.			
1883—J. A. Haenlien	1518..	47 70	
Wm. A. Elliott	2790..	4,042 75	
Halsey W. Crapo, administrator	2969..	24 00	
1884—Pat'k J. Mooney	1155..	6 00	
			$4,469 09
Payment of judgments of Court of Claims:			
1881—Sundry persons	605..	3,934 08	
Sundry persons	606..	5,273 33	
Sundry persons	608..	605 60	
Sundry persons	1177..	480 13	
1883—J. D. Davis	2067..	1,754 79	
			11,447 93
Contingent expenses, steamboat-inspection service:			
1884—Several persons	457..	13 80	
Robt. Chestnut	788..	3 50	
Philo B. Hovey	1759..	153 73	
			171 03
Contingent expenses, assay office, Helena, Mont.:			
1881—J. C. Barr	1877		4 44
Contingent expenses, mints and assay offices:			
1881—New York Daily Bulletin Association	2557		11 00
Contingent expenses, office Director of the Mint:			
1883—Several payees	2270..	16 00	
Herald Printing Company	3414..	3 00	
Gazette Printing and Publishing Company	1952..	2 50	
Several payees	2395..	22 25	
Herald Printing Company, Leadville, Colo	3272..	3 00	
1884—Publisher of Science	1527..	5 00	
E. R. Scidmore	1563..	100 00	
			151 75
Contingent expenses, mint at Denver, Colo.:			
1881—Star Union Line	2783		7 10
Contingent expenses, independent treasury:			
1881—H. A. Webster	2579..	2 50	
1882—C. H. Lord	432..	1 00	
			3 50
Return of proceeds of captured and abandoned property:			
1881—E. J. Quigley	1686		350 66
Reform School, District of Columbia:			
1882—Commissioners, District of Columbia	1529		1 72
Miscellaneous expenses, District of Columbia:			
1883—J. Dent and others, Commissioners	1636		202 55
Washington redemption fund, District of Columbia:			
1883—J. Dent and others, Commissioners	1722		7 02
Metropolitan police, District of Columbia:			
1884—J. R. West and others, Commissioners	1074		3 36
Public schools, District of Columbia:			
1883—J. Dent and others, Commissioners	2012..	2 47	
1884—J. R. West and others, Commissioners	1675..	20 60	
			23 07
Relief of the poor, District of Columbia:			
1883—S. L. Phelps and others, Commissioners	2857..	3,170 85	
1884—J. Dent and others, Commissioners	1677..	292 90	
			3,463 75
Courts, District of Columbia:			
1884—J. R. West and others, Commissioners	1676		5 00
Contingent expenses, District of Columbia:			
1884—J. Dent and others, Commissioners	1678		823 85
Health department, District of Columbia:			
1884—J. Dent and others, Commissioners	1679		301 04
Salary of the President of the United States:			
1884—President C. A. Arthur	1705		4,166 65
Salary assistant treasurer, San Francisco, Cal.:			
1882—W. Sherman	130		20
Salary and expenses special inspector of foreign steam vessels:			
1884—David P. McQueen	142		3 24
Salaries and expenses members National Board of Health:			
1884—Several payees	351		1,540 00
Collecting mining statistics:			
1883—News Printing Company	1606		3 00
Refunding to sureties of C. H. Davis:			
1883—E. Beebe	1147		731 07
Expenses, &c., of act relating to Chinese:			
1884—A. Matson	304..	52 50	
Aleck Macaulay	659..	52 00	
			104 50
Court-house and post-office, Oxford, Miss.:			
1884—S. G. Price	756		1,200 00
Carried forward			29,196 52

1883–'84. OUTSTANDING WARRANTS.

TREASURY—continued.

Brought forward			$29,196 52
Promoting efficiency of civil service:			
1884—N. Y. Transfer	1076..	$3 20	
E. B. Elliott	1809..	566 50	
			569 70
Payment of surplus proceeds of lands sold for direct taxes:			
1884—N. M. Trezevant	1549..	92 56	
Jno. H. Brinkley	1670..	16 12	
			108 68

TREASURY—QUARTERLY SALARIES.

Salaries United States district attorneys:			
1883—S. M. Barnes	2091..	62 50	
1884—A. Q. Keasbey	929..	50 00	
			112 50
Salaries United States district marshals:			
1884—Thos. Boles	53..	50 00	
A. Blythe	89..	50 00	
Joshua B. Hill	579..	100 00	
Jas. C. Weakes	961..	50 00	
Joshua B. Hill	975..	100 00	
F. T. Dubois	994..	50 00	
			400 00
Salaries United States circuit judges:			
1884—Thos. Drummond	1044..	494 50	
Thos. Drummond	788..	511 00	
			1,005 50
Salary United States retired judge:			
1884—Jno. Erskine	1053		288 50
Salary governor Territory of Washington:			
1884—Jno. P. Hoyt	749..	247 25	
Jno. P. Hoyt	864..	255 50	
			502 75

JUDICIARY.

Expenses of United States courts:			
1883—L. Thom	2777..	8 60	
J. Bright	2795..	28 00	
W. Rudasill	2805..	1 50	
G. Gray	2806..	1 50	
S. P. Langford	989..	8 40	
Several payees	1006..	10 80	
Thomas Ayers	1025..	2 80	
J. Lamard	1035..	21 40	
P. Joines	1065..	4 40	
W. W. Griffin	1106..	11 00	
			98 40
Rent of court rooms, United States courts:			
1883—J. J. Moya	561..	30 00	
1884—Lerz Lopez	1200..	36 00	
Jacoba Moya	1201..	36 00	
Augustina Davis	1202..	42 00	
Nich. Smith	1439..	250 00	
J. McElliott	1717..	250 00	
			644 00
Fees of commissioners, United States courts:			
1881—L. Hagarty	3015..	225 10	
D. G. Venable	1497..	21 85	
1883—S. A. Morgan	2426..	15 15	
W. H. Cooke	1997..	10 89	
1884—S. G. Black	396..	51 15	
David Wright	1478..	53 35	
Claiborne Justice	1552..	14 30	
			391 79
Fees of attorneys, United States courts:			
1883—H. H. Eddy	2969..	105 20	
A. M. Rodgers	3402..	300 00	
A. M. Rodgers	2698..	300 00	
1884—A. M. Rodgers	147..	300 00	
A. M. Rodgers	1266..	300 00	
E. T. Sprague	1245..	375 00	
E. T. Sprague	1852..	251 40	
Hugh J. Campbell	1510..	230 00	
Isaac N. Stevens	1457..	284 39	
			2,445 99
Fees of clerks, United States courts:			
1883—W. P. Ward	2666..	47 70	
1884—B. Gildersleeve	1066..	1,139 85	
			1,187 55
Carried forward			36,951 88

1883–'84. OUTSTANDING WARRANTS.

JUDICIARY—continued.

Brought forward			$36,951 88
Fees and expenses of marshals, United States courts:			
1883—O. P. Fitzsimons	3693..	$1,000 00	
1884—J. B. Hill	897..	1,090 21	
E. R. Jones	1198..	5 00	
			2,095 21
Fees of witnesses, United States courts:			
1882—J. J. Geen	3919..	1 00	
1884—Fleming Turner	905..	14 00	
P. A. Potticher and others	1017..	7 50	
Wm. Wattigny	1056..	4 50	
J. B. Hill	1057..	1 50	
Sergt. Jas. McGloin and others	1565..	111 75	
R. K. Reeves and others	1731..	25 50	
			165 75
Fees of jurors, United States courts:			
1884—J. B. Hill	903		451 75
Support of prisoners, United States courts:			
1883—G. W. Earle	3232..	22 50	
1884—E. C. McMillan	913..	212 82	
H. R. Denny	967..	6 75	
J. B. Hill	1530..	119 40	
			361 47
Miscellaneous expenses United States courts:			
1883—Waco Water Company	239..	3 00	
W. O. Neal	1879..	88 00	
1884—J. B. Hill	1046..	8 00	
E. J. Hubbard	1708..	211 90	
Jno. A. Walsh	1774..	250 00	
			560 90
Fees of supervisors of elections:			
1883—J. H. Turner	2953..	20 00	
Wm. M. Randolph	2533..	9 00	
1884—Albert Curry	646..	5 00	
			34 00
Payment to special deputy marshals at Congressional elections:			
1863—Thos. Malloy	3318..	5 00	
1884—Henry Kyle	947..	5 00	
			10 00

DIPLOMATIC.

Contingent expenses, foreign missions:			
1883—W. Blaine	1858		1 59
Salaries consular service:			
1884—O. M. Denny	1518		694 71
Relief and protection of American Seamen:			
1883—S. C. Spalding	2585..	10 00	
L. A. Bruzza	460..	15 00	
1884—James McKenna	476..	125 00	
James McKenna	828..	200 00	
James McKenna	829..	75 00	
James McKenna	833..	50 00	
Thomas S. Williams	837..	250 00	
C. E. Murray	838..	25 00	
E. C. Murray	841..	50 00	
B. Cogan	839..	75 00	
H. W. McDonald	840..	75 00	
J. B. Clement	1288..	10 00	
			960 00
Allowance to widows and heirs of diplomatic officers who die abroad:			
1884—Mrs. A. C. Prindle	1520		164 84

CUSTOMS.

Expenses of collecting revenue from customs:			
1881—A. C. Akin	3104..	3 47	
Chicago, Milwaukee and Saint Paul R. R	4506..	1 39	
P. P. Kidder	188..	08	
T. S. Hodson	1006..	32 58	
Herald Company	3787..	4 50	
1882—M. C. Sloan	795..	27 00	
1883—Several payees	2328..	655 50	
Several payees	2331..	5,626 17	
Several payees	202..	4,522 22	
Steamer Ona	997..	3 50	
Geo. R. Shultz	1889..	603 66	
Several payees	2356..	2,014 44	
Jno. P. Sanborn	2616..	2 13	
1884—Jno. A. Tibbits	1129..	1,332 00	
Thomas Ireland	1789..	480 00	
			15,308 64
Carried forward			57,760 74

1883–'84. OUTSTANDING WARRANTS.

CUSTOMS—continued.

Brought forward			$57,760 74
Repayment to importers, excess of deposits:			
1879—A. F. Stahl	2850..	$3 20	
Several payees	546..	259 31	
Several payees	3715..	2,493 60	
1882—F. Votal	57..	5 80	
W. Dempster	1618..	379 27	
L. W. and P. Armstrong and others	1629..	2,017 10	
1883—Several payees	2683..	2,724 80	
Arnold, Constable & Co	1233..	1,583 25	
Eureka Co. Co-operative Association	1278..	12 00	
Several payees	2737..	216 65	
Anton Winter	3416..	1 80	
1884—Several payees	628..	897 45	
Frank Granger	1292..	4 90	
F. A. Hardy & Co. and others	1614..	52 15	
Eureka Iron Company	1624..	4,200 93	
Heyer Bros. and others	1658..	1,502 41	
			16,354 62
Debentures and other charges:			
1881—T. J. K. Jones	4369		10
Commissions to superintendents of lights:			
1881—R. W. Mullen	3055		37 62
Life-Saving Service:			
1881—Several payees	4199..	120 00	
1882—E. H. Robinson and others	1288..	18 00	
1884—Northern Lake Ice Company	465..	9 60	
Muskegon Novelty Iron Works	1288..	47 00	
Tiffany & Co	1815..	509 00	
			703 60
Revenue-Cutter Service:			
1881—Steamer State of Texas	508		2 35
Contingent expenses Life-Saving Service:			
1881—B. C. Sparrow	4030..	1 23	
1883—Monmouth Beach, &c., Water Supply Company	3291..	10 00	
			11 23
Heating apparatus for public buildings:			
1882—Michigan Central Railroad	850		54
Compensation in lieu of—			
1883 / 1884 Jas. A. Luby	1518		39 79
Depot for Thirteenth District:			
Maurice Eller	2131..	17	
1883—Daily Bee	2481..	5 62	
			5 79
Marine Hospital, Memphis:			
1883—W. W. Murray	3546		400 00
Inspection of neat cattle sent to foreign ports:			
1883—Herald Publishing Company	257		5 63
Salaries, &c., agents at seal fisheries in Alaska:			
1883—Geo. Wardman	2601..	364 98	
Geo. Wardman	3464..	363 02	
			728 00
Expenses of regulating immigration:			
1884—Wm. A. Lowe	1411..	121 66	
Wm. A. Lowe	1683..	95 33	
			216 99
Unclaimed merchandise:			
1884—Eliz Weightman	1819		10 35

INTERIOR CIVIL.

Salaries and commissions of registers and receivers:			
1881—W. J. Hunter	1627..	200 00	
R. H. Waller	518..	94 10	
L. Hanback	665..	49	
J. Dumars	829..	05	
C. N. Thornburg	850..	46	
1883—L. J. Best	1254..	8 75	
A. C. Phillips	1406 .	05	
1884—A. W. De Long	816..	700 00	
Geo. B. Currey	1252..	1,200 00	
E. C. Geary	1265..	1,200 00	
Treasurer United States (Vac Randa)	1496..	1,002 36	
Saml. W. Sherfey	1641..	1,200 00	
			5,606 26
Contingent expenses, land offices:			
1881—American Express Co	112..	1 00	
1883—Star Union Line	1352..	71	
Chicago, Rock Island and Pacific R. R	1641..	12 32	
Ohio and Mississippi R. R	1643..	60	
Carried forward		14 63	81,883 61

1883–'84. OUTSTANDING WARRANTS.

INTERIOR CIVIL—continued.

Brought forward		$14 63	$81,883 61
Contingent expenses, land offices—Continued.			
1883—Detroit and Cleveland Steam Navigation Co	2249..	66	
Saint Paul, Minneapolis and Manitoba Rwy	1745..	11 30	
1884—Flint and Pere Marquette R. R	629..	74	
A. W. De Long	816..	75 00	
Wood River Times	1082..	67 50	
Geo. B. Currey	1252..	300 00	
E. C. Geary	1265..	975 00	
Saml. W. Sherfey	1641..	400 00	
		—	1,844 83
Repayments for lands erroneously sold:			
1881—G. C. Buchanan	891..	74 71	
W. Fenners	1222..	16 72	
T. Gilchrist	1235..	200 00	
J. A. Johnson	1369..	14 00	
H. Evans	1486..	7 00	
J. A. Olson	1822..	14 00	
C. J. Hutt	1924..	14 00	
A. G. Brown	1935..	14 00	
1882—A. L. Talle	193..	2 00	
T. C. Clarke	359..	14 00	
G. Allen	373..	14 00	
S. F. Hardman	505..	14 00	
K. Schroeder	542..	20 00	
C. Bitsch	549..	9 00	
J. H. Moore	887..	19 64	
R. Hutchens	947..	14 00	
1883—J. J. Pelt	1252..	14 00	
J. C. Nix	1313..	1 00	
L. Anderson	1630..	200 00	
Jas. T. Carmichael	11..	7 00	
W. Smith	553..	80 00	
S. Bentley	569..	20 25	
C. Olser	579..	20 12	
H. Harderson	795..	162 63	
M. C. Seltoon	796..	97 68	
T. L. Hunt	812..	100 00	
A. C. Patterson	896..	7 50	
J. E. Irving	919..	18 00	
M. E. Edwards	1135..	7 00	
M. S. Williams	1281..	14 00	
Henry C. Delancey	1425..	9 00	
Edward T. Putnam	1773..	14 00	
Jas. M. Rominie	1805..	7 00	
John Ross	1807..	17 16	
Fredk. H. Kinsey	1914..	200 00	
Ambrose L. Barr	1926..	6 00	
Samuel Sevenson	2025..	15 55	
Erving Cushing	2027..	14 00	
Erving Cushing	2828..	14 00	
Jas. S. Price	2413..	14 00	
Thos. Blount	2341..	2 00	
Russell T. Kerr	2456..	18 00	
1884—A. G. Erwin	255..	21 77	
Jno. A. Reed	264..	13 81	
Fernando Quintano	275..	5 00	
Franklin Salmons	277..	13 87	
Isaac B. Henyan	757..	14 00	
Aurora Gold Mining and Milling Company	911..	10 00	
Wm. H. Colbern	922..	150 00	
D. N. Frisby	946..	14 00	
David Branch	964..	14 00	
Andrew Johnson	1009..	22 00	
Wm. McEntyre	1277..	39 00	
Jno. R. Dean	1284..	40 00	
Jno. Channon	1288..	50 00	
R. A. Buckmaster	1289..	14 00	
Geo. P. McMichael and others	1292..	200 00	
Chas. A. Parrott	1342..	3 00	
Thos. J. Kelly	1344..	14 00	
F. M. Sims	1349..	14 00	
Sam'l L. Cannon	1354..	18 00	
Sam'l Duncan and others	1358..	19 78	
E. Vernon	1362..	14 00	
Gus Kristiansen	1369..	14 00	
Anna Forguson	1388..	90 00	
Elijah W. Padgett	1437..	13 00	
Wm. M. Brown	1439..	14 00	
Chippewa Lumber and Boom Co	1449..	50 00	
Wm. Cotter	1456..	11 00	
O. C. Berg	1484..	14 00	
Carried forward		2,451 19	83,728 44

1883–'84. OUTSTANDING WARRANTS.

INTERIOR CIVIL—continued.

Brought forward		$2,451 19	$83,728 44
Repayments for lands erroneously sold—Continued.			
1884—Louis Hunt	1486..	14 00	
Albert Rogers	1527..	14 00	
Jno. J. Walker	1529..	18 00	
Chas. F. Babcock	1597..	14 00	
Merced Carabajol	1600..	16 00	
Crocker Process Ore Reducing Co	1602..	40 00	
Sam'l R. Breese	1603..	14 00	
S. H. Dunham	1614..	14 00	
Jno. R. McCormick	1626..	49 63	
			2,644 82
Deposits by individuals for expenses of surveys:			
1879—F. P. Swindler	620..	50 00	
1881—Colorado Company Consolidated	255..	25 00	
L. McLane	1338..	4,487 67	
J. B. McDonald	1623..	50 00	
J. W. Dodge	1792..	6,562 57	
J. L. McNeil	2001..	1,309 00	
C. Blair	2042..	45 30	
1882—G. B. Bayley	243..	4,273 90	
German National Bank	347..	6,798 77	
1883—Central Mining and Milling Co	29..	67 50	
J. S. Hutchinson	615..	486 63	
W. S. Campbell	671..	22 50	
Milton Santee	1870..	1,773 78	
Tilden Mining Co	2149..	25 00	
Consolidated Grand View Mining Co	2152..	22 50	
Jno. A. Curtis	2208..	235 54	
1884—Henry Bucholz and Ole Green	165..	30 00	
L. B. Gorham	1195..	31 82	
C. H. Bates	1151..	31 64	
A. P. Johnson	1592..	1,627 26	
Chas. Hermann	1670..	416 03	
			28,372 41
Surveying public and private lands:			
1882—G. S. Collins and others	986..	2,956 10	
1883—Tribune Publishing Co	1944..	6 00	
1884—Hardy & Lindsey	321..	687 54	
J. T. Smith	1198..	9,904 28	
Chas. A. Wheeler	1656..	4,138 41	
Frank F. Johnson	1675..	1,764 40	
Do	1676..	359 78	
			19,816 51
Protecting public lands:			
1883—East Tennessee, Virginia and Georgia R. R	1295..	1 40	
Missoula and Pend d'Oreille Stage Co	1575..	10 75	
Kansas City, Lawrence and Southern R. R	1953..	8 03	
East Tennessee, Virginia and Georgia R. R	1954..	1 40	
1884—East Tennessee, Virginia and Georgia R. R	189..	1 40	
Flint and Pere Marquette R. R	638..	5 55	
Memphis and Charleston R. R	703..	3 75	
Omaha and Republican Valley R. R	891..	2 35	
East Tennessee, Virginia and Georgia R. R	1031..	1 40	
Alabama and Great Southern R. R	1239..	22 05	
			58 08
Salaries office surveyor-general of Louisiana:			
1883—O. H. Brewster	2026		198 50
Depredations on public timber:			
1883—S. M. Eaton	629..	137 91	
I. Gordon	630..	144 15	
E. F. Arrington	631..	75 00	
Flint and Pere Marquette R. R	1733..	10 30	
Texas and Saint Louis Rwy. Co. in Missouri and Arkansas	1939..	7 10	
1884—Saint Louis, Salem and Little Rock R. R	99..	1 65	
Flint and Pere Marquette R. R	654..	1 55	
Georgia Pacific R. R	622..	2 70	
New Orleans and Northeastern R. R	1232..	3 95	
			384 31
Expenses of inspectors, General Land Office:			
1884—Flint and Pere Marquette R. R	608..	2 70	
Memphis and Charleston R. R	612..	20 15	
Solomen R. R	894..	1 72	
			24 57
Settlement of claims for swamp lands and swamp lands indemnity:			
1884—Georgia Pacific R. R	623..	3 80	
Indiana and Illinois Southern R. R	1220..	1 50	
			5 30
Expenses of depositing public moneys:			
1884—Geo. B. Currey	1252		78 30
Relief of F. G. Schwatka, sr., and wife:			
1884—F. G. and Amelia Schwatka, sr	1392		6,000 00
Carried forward			141,311 24

1883–'84. OUTSTANDING WARRANTS.

INTERNAL REVENUE.

Brought forward			$141,311 24
Refunding taxes illegally collected:			
1881—Several payees	3734..	$285 72	
Do	4024..	1,095 03	
Do	1160..	585 83	
Do	1910..	97 79	
Do	3186..	507 96	
1882—Durkee, Young & Co	1325..	121 46	
Several payees	2233..	85 80	
1883—Several payees	3043..	13,206 70	
Do	3181..	4,962 71	
Do	3514..	131 10	
Do	4093..	47 08	
Do	1575..	633 44	
Do	2116..	115 38	
Brooks & Moseley	2269..	2 50	
1884—Several payees	2671..	475 57	
O. F. Sampson and others	4585..	47 40	
Spurlock & Co	4586..	208 04	
Yancey Bros	5822..	8 55	
			22,618 06
Punishment for violation of internal revenue laws:			
1883—J. Mailhouse	2761..	25 00	
J. D. Sanborn	3239..	47 03	
Do	3240..	77 30	
Do	3241..	444 55	
Do	3801..	68 00	
Do	117..	718 24	
Do	118..	492 32	
Do	1252..	490 00	
E. Scull	773..	8 00	
M. P. Manning	914..	30 24	
Do	915..	50 00	
1884—F. S. Neustadt	3313..	200 25	
Jno. D. Sanborn	3469..	48 23	
Do	4327..	192 02	
E. M. Brayton	5364..	72 00	
			2,963 18
Redemption of stamps:			
1881—Donnelly, Gassett & Floya	398..	9 59	
Chicago, Clinton, Dubuque and Minn. R. R	829..	10 37	
Morton & King	1554..	1 67	
J. Mondragon	1968..	15 00	
J. G. Kaufman	1974..	18 75	
W. C. Yates & Co	2301..	5 00	
Southern News Co	2546..	5 00	
J. Vaser	2694..	1 50	
W. S. Chewing	2724..	4 96	
J. Smith	3631..	83	
Farmers' Bank, Beach City, Ohio	3655..	14 33	
C. G. Johnson	3727..	4 58	
1882—Pittsburgh Oil Co	1209..	11 48	
P. Guerra & Son	1512..	5 00	
Peoples' Fire Insurance Co	1686..	11 87	
1883—L. M. Greenball	3098..	1 67	
C. J. Street	3574..	6 00	
Drost & Klummer	45..	4 17	
H. S. Coyle	53..	3 75	
Geo. Seidler	54..	9 17	
Carthage Brewing Co	840..	10 29	
F. Nauroth	2320..	10 00	
Graham & Co	2341..	7 20	
Neill and Pratt Lumber Co	2375..	2 40	
Wm. Schroeder	2519..	32 10	
Albany Morning Express, New York	2964..	8 21	
Montgomery Palace Stock Car Co	3041..	19 00	
First National Bank, Amherst, Mass	3053..	44 78	
Bennett Hardware Co	3266..	1 01	
Saint Louis, K. and N. W. Rwy	3331..	9 86	
W. Armstrong	3527..	2 40	
Jas. Ray	3786..	14 58	
Cleveland, Lorain and Western R.R	4071..	9 50	
Dan Lord, jr	4167..	36	
Connellsville Machine and Car Co	4213..	14 33	
Aetna Iron and Nail Co	4264..	4 69	
Merriam and Morgan Paraffine Co	4348..	8 47	
Seymour Chair Co	4682..	5 28	
Fairbanks Canning Co	4690..	82 84	
Saint Louis Wine Co	4728..	14 59	
Chagrin Falls Paper Co	4753..	5 53	
Cumberland Valley R. R	4813..	21 07	
West Virginia Fibre Co	4829..	8 72	
Carried forward		481 90	166,892 48

1883-'84. OUTSTANDING WARRANTS.

INTERNAL REVENUE—continued.

Brought forward		$431 90	$166,892 48
Redemption of stamps—Continued.			
1884—J. B. Roberts Commission Co	4856..	19 04	
Lee Scott Cattle Co	4858..	11 44	
Grosvenor Dale Co	4929..	17 00	
Salt Association of Michigan	65..	30 82	
Ohio Central R. R	150..	19 00	
Mayflower Mills Co	154..	50 63	
Michigan Saw and File Works	157..	13 87	
Derby Gas Co	418..	8 51	
Wm. King	435..	18 20	
Warren Manufacturing Co	436..	9 50	
Buffalo Insurance Co	473..	9 50	
International Collecting Co	482..	9 04	
Suspension Car Truck Co	483..	18 05	
Bibb Manufacturing Co	525..	13 26	
Norwick Free Academy	611..	5 51	
Franklin Falls Pulp Co	692..	4 27	
D. L. Crossman	700..	20 12	
Winnipeseogee Paper Co	715..	11 51	
Erie and North Shore Despatch	720..	20 90	
Richard Southwick & Humphrey	751..	84	
Fidelity Mfg. Co	882..	5 55	
Bibb Mfg. Co	996..	9 96	
Foreign Committee Domestic and For. Miss. Soc	1034..	8 55	
Dolores Valley Mining Co	1043..	16 81	
Lehigh Construction Co	1046..	17 63	
Warren E. Smith	1054..	3 80	
Star Oil Co	1071..	9 58	
R. Wallace & Sons Mfg. Co	1080..	5 70	
Plimpton Mfg. Co	1082..	38 57	
N. Y. Underwriters Agency	1094..	14 31	
Kaaterskill R. R	1100..	19 00	
Kemble Dramatic Society, Brooklyn	1108..	5 22	
Delhi and Hudson River R. R	1130..	19 00	
Santa Maria Silver Mining Co	1168..	18 71	
First National Bank of Leadville, Colo	1192..	49 63	
Philadelphia Sheep-Butchers' Wool and Skin Assoc'n	1202..	5 98	
John Trusant	1208..	20 00	
Exchange Bank of Macon, Ga	1357..	3 15	
Law Telegraph Co	1384..	11 97	
Kehloe Bros	1390..	10 30	
J. Morton Poole Co	1518..	9 58	
E. H. Hamlin	1562..	11 53	
Home Mutual Aid Assoc'n of America	1592..	9 44	
German National Bank, Cincinnati	1680..	32 15	
Jointa Lime Co	1685..	7 12	
Franklin Insurance Co. of Columbus, Ohio	1739..	31 39	
Union Stove-Lining Co	1770..	4 43	
Meriam and Morgan Paraffine Co	1771..	3 51	
First National Bank of Concord, N. H	1774..	34 14	
Louisville Leather Co	1860..	8 34	
National Oak Leather Co	1862..	3 19	
Carbon Block Coal Co	1875..	1 58	
Home Savings Bank, South Waverly, Pa	1879..	4 01	
Horn Silver Mining Co	1917..	19 00	
Chicago and Erie Stove Co	1973..	14 82	
Cherolithion Collar and Cuff Co	1984..	6 14	
Union Brass Manufacturing Co	1994..	20 18	
Standard Yarn Co	2012..	4 29	
P. Epis. Soc. for promoting religion and learning in New York	2044..	6 14	
Consolidated Roncewalles Silver Mining Co	2051..	4 92	
Belleville and Eldorado R. R	2179..	15 48	
New York Manganese Co	2193..	8 99	
Portland Iron Works, Pennsylvania	2209..	7 60	
R. N. M. Laren	2245..	2 22	
Panama Canal Co	2249..	18 89	
Caynta Forge and Axle Co	2453..	8 30	
National Machinery Co	2506..	9 67	
Weetamore Mills	2526..	5 60	
Miller Co	2592..	6 50	
A. H. Pugh Printing Co	2612..	3 80	
Lake Champlain and Moriah R. R	2621..	7 98	
Campbell's Creek Coal Elevator Co	2627..	5 26	
Empire Lith. and Eng. Co	2638 .	12 18	
Citizens' Bank, Wichita, Kans	2641..	81 41	
Camp Glover & Co	2693..	10 64	
Miners' Supply Co	2695..	8 26	
Schultze, Hill & Nall	2704..	19 00	
Joliet Steel Co	2712..	5 76	
Bank of Lexington, Ill	2717..	56 41	
Carried forward		1,616 18	166,892 48

1883–'84. OUTSTANDING WARRANTS.

INTERNAL REVENUE—continued.

	Brought forward		$1,616 18	$166,892 48
Redemption of stamps—Continued.				
1884	Farmers' Bank of Ky	2730	85 14	
	Glens Falls Gas Light Co., N. Y	2799	4 69	
	E. Hess Matting Co	2842	8 17	
	The Wythe Lead & Zinc Mine Co	2916	12 62	
	Mont Alto Iron Co	2952	18 09	
	Jos. S. Christy	2966	72 45	
	C. H. Perkins	3001	74	
	E. D. Clapp Wagon Co	3062	6 82	
	Economy Saving Ins., Beaver Falls, Pa	3080	29 30	
	Josiah H. Bissel	3128	1 61	
	F. A. Ware & Bro	3185	3 21	
	D. W. Sawens Med. Co	3218	9 08	
	Calvert Lithographing Co	3331	81 53	
	W. J. Booth	3367	3 12	
	C. S. Brehman	3382	1 82	
	Dr. Seth Arnold Med. Co-operation	3429	165 15	
	Northwestern Iron Co	3541	6 12	
	Dashwood, Harper & Co	3554	13 57	
	Galveston Gas Co	3685	2 74	
	H. P. Knowles	3686	6 93	
	C. W. Clifton	3741	66	
	Martindale Bros. & Freeman	3742	3 91	
	Taunton Tack Co	3758	8 06	
	Singer Mfg. Co., Utica, N. Y	3763	85	
	Kodet & Lusty	3793	7 50	
	J. M. Vale	3803	51	
	Will County National Bank, Joliet, Ill	3885	53 48	
	Nashville Fire & Marine Ins. Co., Tenn	3998	16 57	
	Grand Central Mining Co	4027	3 38	
	Holman & Murphy	4060	60	
	Malissa King	4108	20 00	
	Theo McGrass	4112	15 00	
	Wallace Norris	4200	76	
	Raton Bank, N. Mex	4229	132 54	
	Merchants & Miners' Bank, Rosita, Colo	4259	55 40	
	West Nashville Planing Mills and Lumber Co	4282	35 00	
	Second National Bank, Dubuqe, Iowa	4332	49 02	
	East Saginaw Turn Verein, Mich	4392	1 40	
	Honesdale Glass Co., Pa	4462	5 03	
	Ocean City Association, Phila	4465	8 97	
	S. Strunz	4549	14 08	
	Union Bank, Cincinnati	4713	15 94	
	Eastern Distilling Co	4739	18 96	
	William D. Mossman	4914	1 71	
	City National Bank, Grand Rapids, Mich	5144	4 22	
	Peoria Starch Manufacturing Co	5148	5 57	
	Merchants and Miners' Bank, Rosita, Colo	5150	5 60	
	Pond Electric Signal Co	5182	8 82	
	Lucretia B. Greene	5400	5 22	
	Carter American Tanning Co	5410	9 50	
	Hugo Saltner	5411	2 24	
	R. T. Holiday	5428	7 98	
	Cleveland Linseed Oil Co	5430	1 18	
	Citizens' Gas Co	5472	9 27	
	Charlottsville Woolen Mills Co	5492	18 14	
	Frank M. Welch	5497	53	
	Company K, Twenty-third Regiment, N. G. S., New York	5508	2 68	
	Beyer & Rupprechs	5532	5 68	
	J. Peterson	5535	11 42	
	Coney Island and B. R. R	5601	19 09	
	De Veaux College	5655	17 90	
	Mrs. J. Preston Moore	5698	8 13	
	Isaac Nichols	5702	13 96	
	Geo. A. Dudley	5767	6 46	
	Geo. H. Herbert	5773	8 49	
				2,790 49
Allowance or drawbacks:				
1881	Porous Plaster Co	1791	31 11	
1883	McCoy & Co	2851	32 40	
1884	Radway & Co	3933	27 36	
	J. J. Depperman	3965	55 20	
	C. W. Nierder	3970	27 36	
	Jos. Schlitz Brewing Co	4788	219 69	
	A. Gunther & Co	5000	39 77	
				432 89
Salaries and expenses of supervisors and agents:				
1879	W. H. Wheeler	3077	4,844 00	
1881	H. Kellogg	2496	89 82	
	D. Poorman	534	14 00	
1883	T. J. Evans	3773	92	
	Carried forward		4,948 74	170,115 86

1883-'84. OUTSTANDING WARRANTS.

INTERNAL REVENUE—continued.

Brought forward			$4,948 74	$170,115 86
Salaries and expenses of supervisors and agents—Continued.				
1883—Atchison, Topeka and Santa Fé R. R		4198..	6 19	
H. M. Kutchin		4785..	1,021 00	
1884—P. H. McGowan		80..	91 00	
American Rapid Tel. Co		1653..	55	
W. H. Brown		2522..	53 25	
A. M. Crane		5783..	85 65	
L. A. Thrasher		5790..	95 54	
Jno. M. Raum		5867..	110 60	
Est. P. H. McGowan		5871..	68 25	
				6,480 77
Salaries and expenses of collectors:				
1879—Several payees		2597..	823 46	
1881—J. Connell		275..	24	
1882—H. M. Kutchin		1897..	60 72	
1884—E. Tisdale		676..	04	
J. C. Stearns		5085..	554 00	
H. C. Ripley		5819..	30	
				1,438 76
Rebate of taxes on tobacco:				
1884—Schedule	2	3007..	3,950 28	
	3	3008..	1,811 62	
	4	3009..	17,118 43	
	5	3010..	9,222 48	
	7	3011..	282 49	
	9	3012..	3,829 00	
	10	3013..	9,810 93	
	15	3057..	7,111 37	
	16	3081m	4,646 14	
	24	3083..	56,726 37	
	70	3085..	251 69	
	71	3086..	6,394 91	
	67	3087..	16,676 65	
	26	3088..	8,507 11	
	13	3241..	19,173 94	
	153	3242..	923 52	
	14	3296..	55,871 72	
	25	3297..	48,034 89	
	151	3298..	995 78	
	29	3325..	85 31	
	32	3326..	2,842 21	
	36	3327..	119 28	
	40	3329..	371 56	
	80	3330..	1,774 18	
	155	3340..	47,543 13	
	68	3360..	13,692 72	
	33	3383..	20,250 53	
	199	3384..	4,011 74	
	28	3385..	30,173 20	
	27	3386..	137,374 54	
	42	3431..	57,536 60	
	35	3439.	7,830 66	
	37	3443..	5,026 71	
	48	3444..	4,834 38	
	75	3447..	37,085 17	
	53	3448..	5,018 39	
	54	3449..	1,964 81	
	65	3450..	2,685 29	
	57	3451..	2,630 34	
	154	3452..	5,402 06	
	203	3453..	86 17	
	49	3455..	8,276 74	
	56	3456..	2,808 29	
	86	3457..	11,896 73	
	92	3458..	3,662 66	
	81	3557..	15,166 68	
	76	3535..	7,040 83	
	85	3581..	9,761 91	
	229	3582..	27,615 99	
	230	3617..	173 23	
	231	3618..	80 60	
	232	3619..	16 10	
	233	3620..	375 37	
	235	3621..	547 51	
	237	3622..	11 70	
	238	2623..	49 33	
	242	3624..	142 22	
	243	3625..	581 18	
	280	3626..	241 46	
	94	3627..	20,243 47	
	244	3628..	2,086 69	
Carried forward			770,456 99	178,035 39

1883–'84. OUTSTANDING WARRANTS.

INTERNAL REVENUE—continued.

Brought forward			$770,456 99	$178,035 39
Rebate of taxes on tobacco—Continued.				
1884—Schedule 83		3653..	13,401 90	
246		3654..	1,506 03	
281		3655..	1,978 25	
45		3656..	21,172 92	
239		3657..	10,227 90	
251		3658..	2,682 91	
59		3782..	23,673 25	
282		3783..	2,925 29	
96		3784..	5,881 83	
82		3826..	47,375 92	
206		3827..	5,583 82	
247		3828..	10 20	
248		3829..	66 10	
249		3830..	169 81	
253		3831..	1,266 58	
277		3832..	4,077 46	
254		3833..	137 28	
62		3834..	15,710 46	
99		3835..	30,792 97	
201		3836..	16,108 30	
204		3859..	33,652 07	
214		3860..	3,021 19	
216		3861..	81 93	
208		3862..	82 69	
211		3863..	136 85	
213		3864..	64 06	
215		3865..	84 46	
217		3866..	27 28	
64		3867..	25,548 74	
100		3868..	1,060 65	
220		3869..	146 87	
279		3870..	765 63	
104		3871..	1,422 86	
107		3872..	878 97	
207		3873..	34 01	
212		3874..	286 28	
278		3875..	37 56	
283		3876..	10 08	
95		3877..	90,734 00	
292		3878..	47,276 87	
63		3958..	12,193 22	
65		3959..	24,363 68	
98		3960..	4,110 76	
66		3961..	8,717 70	
202		3962..	20,046 75	
102		3963..	936 38	
97		3999..	8,964 78	
105		4000..	21,857 30	
210		4001..	6,741 94	
120		4002..	6,834 51	
109		4003..	1,923 27	
222		4004..	2,288 81	
114		4005..	3,863 47	
116		4006..	5,875 93	
115		4007..	2,562 19	
108		4008..	3,199 01	
289		4009..	650 40	
118		4110..	1,047 54	
113		4011..	8,291 07	
110		4012..	3,132 83	
106		4039..	3,135 70	
117		4040..	423 68	
121		4041..	1,695 49	
124		4042..	7,030 12	
157		4043..	13,294 19	
287		4044..	59 55	
288		4045..	22 98	
255		4046..	10,227 97	
122		4072..	134 17	
123		4073..	974 17	
126		4074..	3,379 32	
205		4075..	18,549 55	
276		4076..	15,689 83	
111		4077..	7,604 36	
112		4078..	12,904 88	
119		4079..	7,189 31	
125		4080..	3,614 57	
127		4081..	5,851 61	
130		4082..	5,839 87	
218		4084..	10,602 86	
Carried forward			1,456,384 94	178,035 39

1883–'84. OUTSTANDING WARRANTS.

INTERNAL REVENUE—continued.

Brought forward		$1,456,384 94	$178,035 39
Rebate of taxes on tobacco—Continued.			
1884—Schedule 256	4107..	21,381 35	
285	4156..	31,800 22	
133	4157..	10 35	
134	4158..	167 39	
141	4159..	14 16	
142	4160..	30 31	
226	4161..	420 90	
131	4162..	20,674 25	
209	4163..	21,185 86	
290	4164..	12,372 89	
221	4165..	26,768 72	
144	4212..	4,497 56	
136	4226..	4,100 99	
138	4227..	14,826 75	
139	4228..	912 85	
145	4229..	673 88	
146	4230..	97 01	
158	4231..	85 75	
159	4232..	144 66	
160	4233..	98 84	
161	4234..	28 05	
224	4235..	59,046 96	
227	4236..	1,308 83	
261	4237..	13,592 94	
263	4238..	11 01	
294	4239..	116 04	
150	4240..	176 70	
132	4241..	15,688 49	
163	4242..	12,856 20	
267	4243..	2,113 49	
262	4244..	11,487 22	
258	4245..	57,144 80	
265	4286..	171 60	
167	4287..	132 13	
168	4288..	10 95	
169	4289..	99 99	
264	4290..	1,125 09	
293	4291..	2,065 85	
170	4292..	4,457 96	
257	4293..	9,307 56	
260	4294..	10,470 59	
304	4295..	55 32	
173	4296..	29 70	
268	4297..	29 24	
270	4298..	24 95	
307	4299..	393 64	
308	4300..	344 09	
174	4301..	921 41	
148	4202..	29,605 59	
166	4303..	7,819 38	
302	4304..	2,729 61	
172	4337..	41,976 72	
272	4338..	8,139 90	
274	4344..	16 85	
311	4345..	31 49	
313	4346..	779 80	
315	4347..	272 11	
228	4348..	24,657 46	
275	4349..	21,685 47	
175	4351..	17,854 22	
310	4352..	51 24	
297	4377..	11,184 25	
177	4378..	15,093 10	
178	4379..	73 51	
179	4380..	32 35	
180	4381..	74 79	
181	4382..	171 64	
189	4383..	1,510 34	
317	4384..	566 38	
184	4385..	25 82	
188	4386..	51 78	
314	4414..	15,588 35	
265	4415..	19,658 14	
191	4416..	1,254 13	
298	4417..	5,495 59	
373	4423..	35,616 73	
363	4424..	4,604 21	
296	4425..	21,927 96	
183	4426..	10,532 85	
299	4429..	13,214 71	
Carried forward		2,132,156 81	178,035 39

1883-'84. OUTSTANDING WARRANTS.

INTERNAL REVENUE—continued.

Brought forward		$2,132,156 81	$178,035 39
Rebate of taxes on tobacco—Continued.			
1884—Schedule 340	4430..	41,659 51	
196	4432..	1,552 07	
348	4433..	118 38	
387	4434..	12,875 88	
425	4435..	94 60	
429	4436..	142 80	
434	4437..	5,030 64	
321	4438..	82 47	
322	4439..	21 16	
325	4440..	27 27	
422	4441..	90 86	
423	4442..	76 71	
426	4443..	32 80	
428	4444..	11 43	
185	4468..	28,119 90	
195	4469..	927 97	
197	4470..	807 60	
316	4471..	12,208 63	
324	4472..	1,211 42	
344	4473..	981 36	
346	4474..	3,462 36	
198	4475..	1,752 91	
431	4476..	10,837 55	
386	4477..	38,183 11	
309	4478..	16,529 56	
432	4479..	137 17	
433	4480..	84 01	
192	4498..	11,461 62	
194	4499..	2,148 07	
459	4500..	343 96	
462	4501..	349 18	
463	4502..	162 46	
465	4503..	1,597 59	
466	4504..	278 84	
193	4505..	1,647 48	
350	4506..	13,412 66	
351	4507..	11,135 17	
438	4523..	30 60	
467	4524..	152 73	
468	4525..	50 54	
470	4526..	62 14	
471	4527..	23 75	
327	4528..	12,038 88	
430	4529..	13,002 31	
390	4530..	40,020 96	
319	4531..	17,641 95	
436	4532..	18,967 16	
352	4533..	78 13	
397	4534..	1,369 40	
439	4535..	1,202 25	
440	4536..	200 35	
443	4538..	1,019 23	
444	4539..	139 56	
445	4540..	22 67	
450	4541..	351 06	
451	4542..	418 36	
474	4543..	113 28	
355	4560..	25 78	
358	4561..	398 84	
360	4562..	10,483 73	
361	4563..	8,158 59	
456	4564..	394 72	
457	4565..	904 54	
458	4566..	420 25	
626	4567..	413 91	
448	4568..	23,947 57	
329	4570..	23,065 48	
354	4571..	9,439 26	
362	4572..	19,606 90	
368	4573..	2,994 43	
453	4574..	8,256 45	
364	4575..	4,172 44	
366	4576..	18,415 00	
365	4577..	13,864 97	
498	4599..	26 47	
502	4600..	11 16	
612	4601..	13 48	
613	4602..	284 07	
615	4603..	14 10	
614	4604..	1,641 95	
Carried forward		2,605,613 46	178,035 39

1883-'84. OUTSTANDING WARRANTS.

INTERNAL REVENUE—continued.

Brought forward		$2,605,613 46	$178,035 39
Rebate of taxes on tobacco—Continued.			
1884—Schedule 617	4605..	69 40	
616	4606..	837 61	
341	4607..	24,584 18	
499	4608..	8,178 05	
611	4609..	1,087 10	
369	4610..	10 01	
370	4611..	128 85	
393	4612..	201 46	
398	4613..	82 30	
500	4614..	28 11	
390	4635..	2,978 78	
399	4636 .	6,926 41	
452	4637..	26,289 93	
486	4638..	10 35	
487	4639..	52 51	
488	4640..	368 18	
489	4641..	39 08	
490	4642..	15 45	
496	4643..	128 49	
497	4644..	21 08	
510	4645..	23 74	
511	4646..	89 40	
512	4647..	57 60	
515	4648..	29 91	
516	4649..	210 14	
627	4650..	38 77	
472	4651..	14,745 49	
379	4663..	1,181 84	
477	4664..	187 22	
483	4665..	244 66	
620	4666..	4,968 96	
624	4667..	526 94	
376	4669..	509 70	
378	4670..	637 07	
650	4668..	283 01	
517	4671..	2,516 04	
647	4672..	900 90	
661	4673..	1,224 61	
374	4674..	20 93	
380	4675..	10 20	
381	4676..	78 34	
404	4678..	189 06	
478	4679..	29 10	
480	4680..	16 17	
481	4681..	196 42	
485	4683..	339 47	
507	4684..	35 46	
383	4685..	10,759 63	
514	4686..	133 49	
543	4687..	13 49	
622	4689..	68 47	
625	4690..	50 85	
629	4691..	38 35	
331	4692..	22,464 07	
505	4693..	628 37	
506	4694..	308 91	
509	4695..	12 48	
580	4696..	46 62	
584	4697..	31 25	
394	4728..	13,294 71	
503	4730..	946 84	
631	4731..	1,244 58	
632	4732..	955 84	
633	4733..	1,324 15	
401	4770..	26,868 52	
513	4771..	15,545 06	
413	4773..	21 62	
414	4774..	4,810 88	
552	4775..	2,028 05	
449	4776..	1,867 35	
518	4777..	13,138 53	
550	4778..	2,948 34	
566	4779..	5,029 13	
675	4780..	3,182 91	
333	4790..	10,678 46	
476	4791..	252 15	
479	4792..	390 69	
618	4793..	113 63	
621	4794..	740 55	
628	4795..	60 56	
Carried forward		2,846,940 27	178,035 39

1883–'84. OUTSTANDING WARRANTS.

INTERNAL REVENUE—continued.

Brought forward			$2,846,940 27	$178,035 39
Rebate of taxes on tobacco—Continued.				
1884—Schedule 630		4796..	95 04	
	339	4797..	18,648 14	
	549	4798..	78,601 89	
	520	4799..	23,668 28	
	532	4800..	1,643 70	
	524	4801..	16 80	
	526	4802..	11 25	
	528	4803..	20 77	
	548	4804..	199 21	
	551	4805..	284 03	
	567	4806..	295 82	
	642	4807..	10 25	
	648	4808..	103 92	
	665	4809..	195 98	
	335	4836..	14,279 30	
	337	4837..	1,558 31	
	334	4838..	11 25	
	491	4839..	73 66	
	529	4840..	3,652 52	
	530	4841..	2,391 63	
	531	4842..	23 45	
	533	4843..	23 40	
	534	4844..	17 06	
	536	4845..	59 34	
	537	4846..	265 16	
	538	4847..	13 43	
	541	4848..	97 93	
	542	4849..	1,912 92	
	544	4850..	24 50	
	546	4851..	60 00	
	634	4852..	323 71	
	636	4854..	72 15	
	637	4855..	119 18	
	639	4857..	314 91	
	640	4858..	239 92	
	641	4859..	929 94	
	649	4860..	71 65	
	660	4861..	2,119 13	
	662	4862..	26 44	
	680	4863..	7,167 91	
	694	4864..	198 77	
	697	4865..	16 11	
	372	4881..	22,368 90	
	402	4882..	10 00	
	406	4883..	43 75	
	407	4884..	11 70	
	521	4885..	92 73	
	527	4886..	143 92	
	545	4887..	472 65	
	569	4888..	101 97	
	570	4889..	1,343 42	
	585	4890..	47 92	
	644	4891..	18 09	
	646	4892..	1,881 18	
	651	4893..	22 05	
	655	4894..	13 68	
	657	4895..	551 47	
	666	4896..	14 40	
	695	4897..	240 71	
	696	4898..	1,377 31	
	698	4899..	14 44	
	699	4900..	26 75	
	701	4901..	924 12	
	733	4903..	335 78	
	734	4904..	11 33	
	737	4905..	15 58	
	739	4906..	41 88	
	300	4927..	11,423 67	
	408	4928..	2,546 22	
	409	4929..	958 11	
	535	4930..	2,104 71	
	643	4931..	1,707 16	
	645	4932..	14 85	
	652	4933..	437 36	
	658	4934..	26 55	
	659	4935..	759 00	
	664	4936..	12,728 30	
	702	4937..	943 49	
	703	4938..	139 22	
	704	4839..	443 35	
Carried forward			3,071,156 15	178,035 39

1883-'84. OUTSTANDING WARRANTS.

INTERNAL REVENUE—continued.

Brought forward		$3,071,156 15	$178,035 39
Rebate of taxes on tobacco—Continued.			
1884—Schedule 728	4940..	712 55	
729	4941..	612 25	
730	4942..	5,952 62	
738	4943..	340 02	
705	4944..	7,492 82	
759	4945..	4,468 89	
761	5001..	44 80	
762	5002..	12 83	
766	5003..	25 45	
767	5004..	13 90	
415	5005..	25,255 40	
419	5006..	140,822 22	
555	5007..	31 26	
723	5008..	12 31	
777	5009..	268 50	
607	5011..	3,257 93	
799	5012..	4,434 15	
412	5013..	15 41	
416	5014..	10,473 94	
560	5015..	34 89	
563	5016..	105 52	
565	5017..	353 76	
576	5018..	1,236 47	
421	5022 .	6,144 87	
579	5023..	17 70	
591	5024..	352 10	
592	5025..	508 15	
685	5028..	10 51	
688	5029..	133 80	
690	5030..	64 29	
691	5031..	2,096 15	
706	5032..	3,111 53	
760	5034..	1,302 49	
769	5035..	142 95	
771	5036..	2,961 93	
776	5037..	127 20	
779	5038..	127 68	
781	5039..	20 79	
782	5040..	133 60	
784	5041..	167 69	
785	5042..	695 65	
740	5045..	537 57	
768	5046..	14 56	
417	5090..	363 24	
461	5091..	23,396 55	
554	5093..	26 42	
556	5094..	14 47	
557	5095..	70 05	
564	5096..	112 45	
571	5097..	169 26	
572	5098..	203 02	
577	5101..	42 99	
578	5102..	31 54	
581	5103..	748 95	
583	5104..	65 21	
586	5105..	43 73	
588	5106..	117 69	
594	5108..	15 34	
595	5109..	477 77	
596	5110..	32 08	
597	5111..	16 40	
599	5112..	2,988 20	
602	5113..	49 76	
603	5114..	80 96	
604	5115..	13 40	
605	5116..	18 49	
606	5117..	18 07	
608	5118..	13 52	
667	5119..	346 64	
668	5120..	182 91	
669	5121..	23 41	
670	5122 .	4,408 89	
672	2123..	12 86	
673	5124..	1,655 08	
674	5125..	434 25	
676	5126..	766 11	
679	5127..	58 99	
681	5128..	902 55	
682	5129.	425 21	
Carried forward		3,334,151 71	178,035 39

1883–'84. OUTSTANDING WARRANTS.

INTERNAL REVENUE—continued.

Brought forward		$3,334,151 71	$178,035 39
Rebate of taxes on tobacco—Continued.			
1884—Schednle 683	5130	1,117 85	
684	5161	52 47	
686	5132	1,131 03	
689	5133	734 40	
693	5134	3,043 84	
772	5135	20 55	
773	5136	97 23	
774	5137	19 20	
775	5138	48 92	
788	5139	85 25	
792	5140	1,138 58	
726	5141	4,777 46	
801	5142	22,347 61	
743	5195	251 90	
754	5196	339 92	
758	5197	367 74	
745	5198	15 79	
752	5199	14 02	
755	5200	13 84	
741	5201	12 43	
748	5202	302 92	
753	5203	30 99	
710	5204	13 07	
711	5205	62 17	
715	5206	3,126 26	
721	5207	17 80	
727	5208	1,526 22	
189	5209	586 48	
791	5211	20 74	
796	5213	27 00	
798	5214	81 06	
744	5215	5,816 69	
787	5216	407 73	
795	5217	26 80	
342	5218	92,030 32	
787	5219	98 22	
712	5220	146 40	
714	5222	537 79	
717	5223	418 38	
719	5224	374 57	
720	5225	138 44	
722	5226	148 03	
746	5227	59 26	
747	5228	743 32	
751	5229	400 52	
797	5230	80 57	
800	5231	17 61	
803	5232	254 17	
813	5233	1,395 87	
814	5234	15 00	
802	5235	61 52	
805	5237	370 16	
808	5238	23 21	
809	5239	31 52	
810	5240	116 00	
812	5241	13 22	
816	5243	45 44	
817	5244	1,141 95	
818	5245	48 61	
475	5255	45,910 07	
819	5256	1,479 25	
820	5257	103 54	
821	5258	21 66	
822	5259	57 82	
823	5260	33 83	
824	5261	26 58	
W. P. Crow & Son	5876	20 00	
			3,528,191 12
Repayment of taxes on distilled spirits destroyed by casualty:			
1884—Bonnie Bros. and others	5373		180 90

INTERIOR—INDIANS AND PENSIONS.

Civilization fund:			
1881—W. McKay	3354		8 40
Fulfilling treaties with Pawnees:			
1878—C. McFarlane	2902		43 95
Fulfilling treaties with Chippewas of Red Lake, &c.:			
1881—P. H. Beaulieu	3283		40 00
Carried forward			3,706,499 76

1883-'84. OUTSTANDING WARRANTS.

INTERIOR—INDIANS AND PENSIONS—continued.

Brought forward			$3,706,499 76
Incidental expenses Indian service in Arizona:			
1882—F Dudleigh	1055..	$30 36	
1883—W. Strong	1212..	150 00	
Thomas E. Ellis	4697..	479 36	
Tom Sawyer	4702..	3 83	
			663 55
Incidental expenses Indian service in Montana:			
1883—D. Shanahan	1214..		14 50
Incidental expenses Indian service in Oregon:			
1883—Depot Charley	1443..	17 25	
C. Smith	1469..	43 50	
Adams	1470..	60 00	
Baldy	1471..	43 50	
Wallace	1472..	23 75	
J. Footenay	1473..	42 00	
Catfish	1474..	15 00	
H. Howard	1475..	61 25	
A. Lincoln	1476..	12 00	
Long	1477..	37 50	
Dick	1478..	22 50	
F. Selsec	1479..	30 00	
Chetcal Bob	1480..	18 00	
Chetcal Ben	1481..	48 00	
Old Charley	1482..	30 00	
Bob Metcalf	1483..	58 50	
Jim Hansey	1484..	30 00	
Andrew	1485..	25 00	
Shoemaker Jim	1486..	31 50	
Sullex Jim	1487..	78 75	
Billie	1488..	33 00	
Henry	1489..	12 00	
John Adams	1490..	31 50	
W. Chetcal	1491..	12 00	
Sixes Mack	1492..	79 50	
Sixes Joe	1493..	21 25	
Sixes Billie	1494..	19 00	
Abey	1495..	22 50	
Bensill	1496..	22 50	
Ben Harding	1497..	22 50	
Johnny McRay	1498..	93 75	
Capt. Augur	1499..	23 75	
Jeff McRay	1500..	63 75	
Joshua Mack	1501..	50 00	
Mike	1502..	77 25	
Sampson Billie	1503..	21 25	
Ed Augur	1504..	18 00	
Lame Joe	1505..	17 00	
Enoch Arden	1506..	20 00	
Penton Charlie	1507..	23 75	
Coquil Dane	1508..	25 00	
Jake	1509..	45 00	
A. Noltnatnay	1510..	27 50	
California Tomy	1511..	45 00	
Sutton	1512..	40 25	
Shelhead Charley	1513..	45 00	
H. Jordan	1514..	52 50	
Henry Clay	1515..	45 00	
L. P. Ben	1516..	51 25	
Amos	1517..	46 50	
Chetcal Tom	1518..	23 75	
Chetcal Aleck	1319..	33 75	
Chetcal Dick	1520..	23 75	
Noltnack Aleck	1521..	48 00	
Jim Watts	1522..	18 00	
H. Fuller	1523..	45 00	
J. Chapman	1524..	101 50	
W. Strong	1525..	31 50	
Capt. L. Farm	1526..	25 00	
Jerry Cass	1527..	86 75	
Klamath John	1528..	66 25	
Baldwin	1529..	18 00	
Old Wallace	1530..	12 00	
W. Hansey	1531..	25 00	
Chella Martin	1532..	12 00	
Euchre Billie	1533..	19 00	
Dutchman	1534..	14 00	
Wistlow	1535..	19 00	
Chasta Costa Smith	153o..	14 50	
John Brown	1537..	19 00	
			2,491 00
Carried forward			3,709,668 81

1883–'84. OUTSTANDING WARRANTS.

INTERIOR—INDIANS AND PENSIONS—continued.

Brought forward			$3,709,668 81
Incidental expenses Indian service in New Mexico:			
1883—C. H. Coleman	1340	$36 00	
F. Montana	1342	7 50	
C. A. McVeigh	1360	10 50	
M. Greigo	1453	36 00	
			90 00
Incidental expenses Indian service in Idaho:			
1881—F. Schultz	519	156 00	
V. A. Cockrell	526	13 00	
			169 00
Incidental expenses Indian service in Washington:			
1882—J. C. Johnson	665		30
Incidental expenses Indian service in Utah:			
1883—D. S. Moseby	2112		250 00
Incidental expenses Indian service in California:			
1883—Bright & Chute	5247		75
Pay of Indian agents:			
1883—W. M. Stanley	1202	41 21	
1884—Legal representative of Jonathan Biggs	910	375 00	
A. H. Jackson	1887	28 48	
			444 69
Holding general council of Indians:			
1881—J. B. Folsom	2966	40 00	
S. Foman	2969	18 00	
			58 00
Contingencies of Indian Department:			
1883—Colorado National Bank	5789	450 00	
1884—Andrew L. Axtell	972	15 20	
			465 20
Telegraphing and purchase of Indian supplies:			
1879—New York Stewart Works	306	2 00	
1883—J. T. Haskell	2830	11 05	
American Rapid Telegraph Company	4879	30	
1884—Gazette	242	11 25	
American Rapid Telegraph Company	844	60	
			25 20
Transportation of Indian supplies:			
1883—W. Spiegelburg	2874		40 31
Buildings at agencies and repairs:			
1883—J. Groundhog	2568	1 67	
Candalaria	5097	9 00	
			10 67
Support of Chippewas, Pillagers, and Lake Winnebagoshish bands:			
1882—She-mat-gun-ist	59	2 00	
Bag-bah-ne-gon-nee	60	4 62	
A. Ballenger	62	13 63	
Ah-quak-be-ta-wind	62	2 50	
Sah-Ouod	63	4 50	
1883—J. Bonga	1914	7 00	
A. Bellenger	1915	7 50	
			41 75
Support of Blackfeet, Bloods, and Piegans:			
1881—J. W. Soper	1189		4 09
Support of Crows:			
1881—A. P. Fox	1610		64 00
Support of Indians on Malheur Reservation:			
1883—C. Moore	1414		17 43
Support of Indian children in schools in States:			
1883—W. T. Buckley	3601	29 42	
1884—Pacific University and Tualatin Academy	92	125 33	
			154 75
Support of schools not otherwise provided for:			
1884—J. B. A. Brouillet	278	108 34	
R. F. Hunter	1632	500 00	
Peter Lafelire	1045	51 60	
M. L. Leonard	1948	16 40	
			676 34
Support of Sioux of different tribes, including Santee Sioux, &c.:			
1883—W. Barnett	1416		100 13
Support of Navajoes:			
1882—W. Spiegelburg	1287		17 44
Support of Apaches of Arizona and New Mexico:			
1883—A. Berger	1358	33 25	
C. Roberts	1429	45 00	
Little Joe	1430	90 00	
M. Cassara	1431	100 00	
C. M. Rogers	1432	150 00	
P. B. Brannan	1433	231 75	
E. W. Osborn	1337	350 00	
1884—W. Rosenthall	2011	168 50	
			1,168 50
Carried forward			3,713,467 36

1883–'84. OUTSTANDING WARRANTS.

INTERIOR—INDIANS AND PENSIONS—continued.

Brought forward				$3,713,467 36
Support of Chippewas of Lake Superior:				
1883—M. Swift	1344		126 00	
G. Hofell	1347		12 00	
B. La Rock	1349		60 00	
J. F. Shonblow	1350		68 00	
B. P. Holmes	1351		182 00	
T. Thayer	1352		66 54	
E. J. Banks	1354		37 50	
P. Ivory	1428		41 00	
R. D. Pike	2603		25 00	
				618 04
Support of Sioux, Yankton tribe:				
1883—N. J. Cramer	1648			2,010 00
Payment to North Carolina Cherokees:				
1883—J. L. Henry	2838			150 00
Interest on Pottawatomie education fund:				
1883—W. F. Buckley	3607			7 49
Removal and support of Confederated bands of Utes:				
1882—H. Thomas	701		12 50	
G. W. Fitzsimmons	702		12 50	
W. S. Cooper	703		12 50	
				37 50
Interest on Osage fund:				
1884—J. T. Kuhlman	1382			444 20
Fulfilling treaties with Miamis of Indiana:				
1884—Shec E Chac Quah, alias Catharine Gordon	1866			21 17
Army pensions:				
1881—J. White	2550		24 00	
M. Jeffers	2551		30 00	
M. Davis	2552		24 00	
G. B. Kelly	2559		24 00	
S. Darroher	2564		47 85	
Barbersville Stage Line	2566		4 50	
1883—Mrs. T. A. Courtney	2676		11 40	
F. A. Wilder	2685		2 05	
R. Gamble	188		12 05	
F. E. Robey	189		27	
E. Griffin	334		13 33	
H. M. Gregg	397		2 67	
F. Deginning	411		29 60	
G. Gardner	418		2 13	
Weatherly & Reiley	432		3 73	
A. Keitts	459		53	
W. C. Corbett	490		1 87	
J. W. Graham	513		3 55	
T. F. Wells	825		21 87	
M. Cole	993		7 43	
J. L. McCarty	1012		20 00	
J. Wallace	1728		11 47	
E. L. Conn	1901		39 47	
A. Godfrey	2041		5 87	
C. D. Clapp	2076		8 27	
M. L. Bradshaw	2162		6 67	
P. Walters	2169		9 87	
T. English	2327		35	
G. Wright	2472		16 27	
E. Goodrich	2673		2 40	
M. Jones	2727		7 47	
J. Bradt	2731		20 00	
S. Hamilton	2893		12 27	
Delia Brown	3312		14 67	
J. F. Venatte	3322		1 07	
Samuel McDonough	3330		10 13	
W. M. Stockwell	3370		2,494 82	
Alexander Christian	3437		12 00	
Annie Martin	4263		10 40	
John Goudy	4361		1 00	
R. M. Howard	4987		453 00	
Lida J. Brown	5018		8 53	
1884—Lydia Danel	56		4 00	
Nancy Blackman	57		25	
David Ballard	355		24 00	
Nancy J. Grover	383		8 80	
H. V. Asseldonk	426		21 60	
Mary Robbins	509		10 93	
Mariah Deckerd	535		14 40	
P. F. Crosby	607		17 60	
Noah Brake	863		18 93	
A. L. Axtell	972		24 00	
William John	1005		8 00	
Sarah J. Conquest	1188		24 00	
Carried forward			3,609 34	3,716,755 76

1883–'84. OUTSTANDING WARRANTS.

INTERIOR—INDIANS AND PENSIONS—continued.

Brought forward		$3,609 34	$3,716,755 76
Army pensions—Continued.			
1884—W. Ronan	1228..	18 93	
Mary Ann Goldsmith	1283..	20 53	
Patrick Moran	1515..	53 60	
Joseph M. Sadler	1533..	23 73	
Rebecca Hathaway	1593..	13 07	
William Rippon	1725..	16 27	
A. F. Sanborn	1741..	16 00	
T. H. Stager	1818..	12 53	
Henry Aman	1825..	7 20	
T. J. Crabtree	1834..	22 40	
Toby Reed	1837 .	24 00	
G. B. McCarta	1988..	15 47	
C. L. Foster	200?..	14 40	
Rachel Hornbrook	2005..	8 00	
Rebecca Forbes	2033..	24 00	
			3,899 47
Arrears of Army pensions:			
1884—A. F. Sanborn	1741..		84 25
Navy pensions:			
1883—A. Steward	387..	18 13	
K. Valentine	388..	15 73	
1884—Emily Benham	1723..	40 00	
J. W. Owen	1868..	51 00	
			124 86

WAR DEPARTMENT.

Subsistence of the Army:			
1881—C. A. Harrison	2435..	29 10	
A. Bennett	2444..	13 60	
E. Lee	2454..	21 00	
L. Moore	2456..	17 20	
J. Siler	2461..	20 20	
1882—Several payees	1152..	6 10	
W. H. Rosebury	1318..	7 50	
D. L. Bradley	1458..	22 00	
D. Maxwell	1463..	8 75	
1883—J. D. Dan	4234..	3 75	
A. K. Hatch	4246..	11 50	
C. Wilcox	4259..	7 50	
D. McNulty	4578..	13 75	
J. F. Tobias	4522..	39 55	
N. Kehr	4877..	7 50	
P. Vorse	1277..	3 75	
D. T. Benjamin	1453..	2 75	
W. H. Erett	1454..	3 50	
A. Vogler	1456..	7 50	
W. H. Chaitle	1463..	5 00	
J. R. Dow	1494..	7 50	
J. Ecker	1577..	12 00	
G. E. Hanson	1582..	50	
O. P. Hanks	2448..	7 50	
1884—W. H. Pender	745..	6 75	
			285 75
Regular supplies, Quartermaster's Department:			
1879—J. C. Birdsong	2346..	16 00	
G. W. Childers	2352..	10 00	
1881—J. W. Phillips	2604..	40 00	
J. M. Morrison	2611..	18 00	
F. E. Butterfield	5012..	15 90	
S. C. Clevenger	5406..	1 00	
R. Guitterez	381..	56	
Several payees	1130..	524 80	
Do	1152..	8 64	
O. P. Nelson	1174..	10 50	
C. Robbins	1176..	9 25	
J. B. Kenney	3090..	2 66	
J. Jolley and O. Wright	3342..	14 25	
J. D. Houck	585..	3 84	
1883—J. K. Garner	4360..	6 00	
W. G. Humphries	4367..	6 00	
W. C. Tomlins	4527..	25 00	
Several payees	692..	314 16	
W. Burford	1363..	13 50	
J. C. Lane	1368..	11 25	
E. Pickrell	1369..	82 50	
Several payees	5556..	330 83	
1884—W. H. Pender	745..	2 70	
			1,467 34
Incidental expenses, Quartermaster's Department:			
1881—G. Williams	2177..	15 00	
Several payees	2207..	736 58	
Carried forward		751 58	3,722,617 43

1883–'84. OUTSTANDING WARRANTS.

WAR DEPARTMENT—continued.

Brought forward			$751 58	$3,722,617 43
Incidental expenses, Quartermaster's Department—Continued.				
1881—J. Roe and others		2221..	24 00	
H. L. Ripley		2225..	1 40	
Several payees		2241..	345 10	
J. Miller		2632..	58 34	
J. Brown		2852..	4 33	
M. Green		2857..	10 00	
P. Pfaff		2858..	3 50	
H. McCoin & Co		2860..	31 40	
J. Thompson		2862..	8 33	
Several payees		2867..	24 20	
J. Welch		2960..	6 60	
F. E. Butterfield and others		5012..	8 55	
Several payees		1202..	89 90	
H. H. Humphreys		1206..	1 08	
T. H. Logan		1208..	24	
J. N. McCreary		1223..	23 00	
W. P. Howard		1263..	1 26	
M. D. Cross		1287..	87 92	
C. Constantine		1288..	48 00	
J. O. Molke		1291..	6 80	
H. C. Coates		1896..	14 87	
1883—W. Brown		4281..	69 00	
J. Diego		4282..	36 00	
J. M. Hyde		4465..	1 00	
A. Crawford		4493..	2 00	
J. C. Doty		4495..	22 50	
C. Wilkie		6395..	4 80	
B. M. Whitney		552..	1 25	
J. A. Lackey		1324..	20 00	
H. McClarin		1325..	28 00	
J. & T. Smith		1389..	14 18	
C. A. Redd		1534..	40 50	
Several payees		1638..	31 50	
J. G. Mittlesdorf		5494..	2 10	
Several payees		5936..	286 35	
1884—Anton Hofer		13..	31 95	
Paul Salenting		197..	26 60	
W. H. Pender		745..	3 15	
E. Berberect and others		1311..	206 80	
R. F. Myers and others		1830..	83 10	
				2,461 18
Transportation of the Army:				
1881—J. G. Scales		2324..	5 00	
W. F. Jones		2327..	6 00	
Oregon Steam Navigation Company		2586..	12 00	
W. H. Dorsey		3187..	15 00	
Burt & Darrot		3190..	112 00	
W. B. Smith		3191..	60 00	
A. W. Chappelle		4394..	25 89	
Hot Springs R. R		4395..	267 50	
Do		4399..	74 40	
F. E. Butterfield and others		5012..	2 40	
Memphis & Charleston R. R		5018..	1 28	
Tickenney Road & Bridge Co		5107..	31 25	
Baltimore and New Berne Steamship Line		5293..	1 20	
Arkansas, Texas and Pacific Mail Company		5407..	16 50	
Maine Central R. R		309..	5 50	
Goodrich Transport tion Company		310..	6 00	
International Stage Company		312..	7 50	
R. Gutierrez		398..	5 30	
W. Young		1071 .	22 00	
A. Staker and others		1125..	132 50	
Central Vermont R. R		1773..	3 20	
G. Briggs		3796..	73 60	
New York and Wilmington Steamship Company		4310.	3 13	
N. E. Gallentine		4317..	47 00	
Hot Springs R. R		4854..	7 50	
S. L. Mitchler		5202..	9 00	
A. F. Simonds		5203..	1 50	
Pennsylvania Company (Star Union Line)		5393..	75	
Oregon Navigation and R. R		5396..	144 15	
Walla Walla and Colfax Stage Company		5432..	1 90	
Star Mail and Transportation Company		5437..	16 75	
1882—Olds River Bridge and Ferry Company		40..	14 00	
Sydney and Black Hills Stage Company		41..	1 28	
W. F. Osborne		100..	2 33	
Florida Line of Steamers		159..	2 18	
Green Bay and Minnesota R. R		166..	5 95	
Wyoming Stage Company		288..	11 50	
Western Transportation Company		335..	209 00	
Carried forward			1,363 94	2,725,078 61

1883–'84. OUTSTANDING WARRANTS.

WAR DEPARTMENT—continued.

Brought forward			$1,363 94 $2,725,078 61
Transportation of the Army—Continued.			
1882—Oregon Road, Bridge and Ferry Company	342..	17 38	
Cumberland Valley R. R	449..	9 04	
Virginia Steamboat Company	957..	75	
Corpus Christi, S. D. & R. G. Ry	2365..	24 75	
T. Masterson	2880..	50 00	
W. Meagher	3349..	7 87	
Memphis and Charleston R. R	3360..	12 00	
Indianapolis and Saint Louis R. R	3426..	2 90	
Do	3427..	2 00	
R. I. Soper	3773..	260 09	
R. I. Sopher	3776..	227 37	
H. D. Watson	3783..	39 00	
E. O'Connell	3784..	536 00	
Macon and Brunswick R. R	3790..	17 00	
Denver and Rio Grande R. R	3861..	1 10	
J. Gates	3877..	366 30	
H. Huskison	4073..	10 00	
Memphis and Charleston R. R	4080..	7 43	
E. Foster	4139..	2 00	
B. Guire	4147..	64 00	
East Tennessee, Virginia and Georgia R. R	4149..	6 76	
B. Handy	4151..	25 00	
J. Holmes	4152..	12 00	
Maine Central R. R	4158..	6 75	
J. M. Green	4178..	80 00	
Missouri, Kansas and Texas R. R	4727..	5,299 61	
J. Albright	5400..	32 00	
Midland and North Carolina R. R	5603..	8 60	
F. M. Rains	5887..	20 11	
Olds Road Bridge Company	9291..	5 57	
H. White	6351..	26 00	
1883—Payette River Ferry Company	491..	4 50	
J. S. Parke	921..	78	
W. F. Castellow	1420..	21 00	
H. Snodden	1421..	42 00	
Corpus Christi, San D & R. G. R. R	1602..	4 00	
J. Barnett	1621..	98 12	
Several payees	1638..	2 50	
W. Connors and others	3982..	79 00	
Durango Toll Road Company	3983..	8 00	
D. Abell	3989..	30 00	
E. H. Allen	4709..	27 00	
Tripp and Underwood	6215..	3 37	
Charles Yost and others	6837..	3 70	
1884—Tripp & Underwood	91..	1 50	
C. Summerhausen	291..	2 85	
1884—Maine Steamship Company	292..	13 44	
Siskiyou Wagon Road Company	453..	4 00	
Dayton and Lewiston Stage Company	455..	3 50	
Baltimore and Potomac R. R	458..	1 86	
Isaac Lloyd Stage Company	853..	1 75	
H. S. Parkin	1076..	7 00	
Cumberland Valley R. R	1090..	1 14	
Do	1093..	30	
W. H. Damsell	1262..	3 35	
Little Rock, Mississippi and Texas Ry	1263..	1 90	
Webster and Fort Sisseton Stage Company	1639..	2 50	
Atlanta and West Point R. R	1642..	144 91	
Copper Queen Mining Company	1643..	9 25	
Jas. F. Ayers	1660..	18 00	
			9,084 45
Draft and substitute fund:			
1883—W. Carll	4740		93
Twenty per cent. additional compensation:			
1883—L. Ganguagh	1441		30 03
Commutation of rations, prisoners of war:			
1881—A. Pabst	3112..	5 25	
F. Noll	3167..	25 50	
A. Frame	3417..	27 25	
G. H. Stanhope	3523..	6 50	
R. Potter	3543..	2 75	
W. G. Knapp	3639..	6 75	
W. H. Streekel	3685..	56 00	
J. Faughan	1362..	3 00	
S. A. Anderson	1485..	49 25	
Edgar & Hamler	1525..	64 25	
J. Wing	1545..	8 25	
W. S. Seavey	1571..	8 00	
G. Baumeister	1631..	8 75	
J. B. White	1647..	28 50	
Carried forward		300 00	3,734,194 02

WAR DEPARTMENT—continued.

Brought forward			$300 00	$3,734,194 02
Commutation of rations, prisoners of war—Continued.				
1882—H. Whetzel	1668..		29 00	
G. Weaver	1677..		6 50	
J. W. Null	1684..		7 50	
1883—J. Roosa	4568..		56 25	
M. V. B. Hall	4606..		75	
L. Cox	4615..		50	
M. C. Richardson	4621..		66 00	
G. W. Chase	4635..		22 25	
D. Hall	4652..		1 25	
T. Hewitt	4659..		8 75	
E. Johnson	4660..		6 25	
S. Sturdevant	4675..		3 25	
J. Atling	4695..		4 50	
J. Brennan	4703..		3 25	
E. Barbridge	4706..		5 50	
R. Gunther	4708..		8 25	
J. W. Benway	4712..		19 00	
A. J. Hackett	4713..		16 25	
M. Warren	4720..		25 75	
A. E. Bennett	4837..		44 00	
L. S. Burroughs	4839..		75	
H. Lock	4962..		9 00	
M. A. McNamara	4979..		15 00	
C. Murray	4989..		55 50	
J. N. McFay	4994..		3 00	
D. S. Irelan	5026..		75	
D. Linehan	5030..		2 00	
S. W. Murphy	5031..		1 75	
J. Scanlan	5046..		57 25	
W. Nuber	5056..		55 00	
A. Thomas	5071..		6 75	
M. F. Stratton	5084..		4 75	
B. Young	5093..		8 75	
C. B. Watson	5124..		36 50	
H. Sayler	5163..		11 25	
E. Kingsbury	5170..		2 25	
W. Haddock	5189..		6 25	
T. Lonegan	5192..		14 00	
L. and R. Hall	5202..		44 75	
J. C. Cooper	5250..		6 50	
M. Garner	5286..		42 00	
J. Kenney	5306..		7 00	
P. Shanlin	5311..		2 00	
T. Brown	5322..		12 00	
J. W. Morgan	1564..		1 00	
S. Bell	1720..		70 75	
J. Bunnell	1724..		9 25	
C. H. Alderson	1753..		7 25	
E. A. Shuffleton	1765..		36 25	
W. H. Baker	1766..		43 00	
M. Hopkins	1773..		10 00	
E. W. & S. S. Foster	1901..		29 00	
B. P. Barrows	2060..		6 00	
P. Walcott	2067..		7 50	
J. S. Bradley	2087..		8 75	
F. M. Sweesey	2096..		8 00	
L. Latham	2104..		50	
W. & M. C. O'Brien	2112..		19 00	
J. Heneager	2129..		7 25	
S. C. Kidder	2139..		3 00	
J. W. Howk	2142..		4 50	
R. Pollock	2144..		3 50	
S. J. & C. Wauham	2156..		6 50	
B. F. Cook	2173..		21 00	
E. A. McCrillis	2188..		19 50	
J. B. Lafief	2246..		103 75	
B. French	2248..		3 25	
C. VanGilder	2255..		12 25	
W. H. Moore	2257..		12 00	
A. C. Van Horn	2258..		13 25	
B. Fagan	2269..		1 75	
W. Ringle	2319..		2 75	
P. Broughton	2324..		13 25	
J. Barry	2329..		9 50	
W. Knight	2335..		56 75	
E. J. Vincent	2349..		42 00	
L. Freller	2356..		6 75	
C. Rice	2426..		46 00	
O. P. Hanks	2448..		6 75	
A. Buell	2715..		3 00	
				1,694 00
Carried forward				3,735,888 02

1883–'84. OUTSTANDING WARRANTS.

WAR DEPARTMENT—continued.

Brought forward				$3,735,888 02
Medical and hospital department:				
1881—F. A. Davis	5244..	$3 00		
T. S. Cook	203..	4 00		
J. Reed	3582..	33 00		
J. Reed	4490..	28 25		
1882—H. M. Skillman	892..	20 00		
1883—H. J. Reed	3082..	35 40		
J. H. Lewis	4700..	18 00		
W. L. Marshall	6481..	3 00		
G. P. Sampson	1691..	15 00		
				162 65
Barracks and quarters:				
1881—H. McQuade	1057..	1 25		
1883—T. B. Reiley	1384..	30 00		
1884—W. H. Pender	745..	6 30		
				37 55
Pay, transportation, &c., Oregon and Washington volunteers:				
1881—W. H. Dillon	2384..	274 40		
W. Rowland	2389..	72 89		
1883—S. A. Phillips	3583..	344 82		
				692 11
Horses, &c., lost in the military service:				
1881—F. M. Jordan	569..	148 99		
F. White	707..	122 50		
L. Becker	711..	109 60		
G. Myers	823..	125 00		
1883—C. B. L. Rowland	3915..	140 75		
H. Been	4313..	11 75		
M. A. Frisby	1069..	200 00		
J. Hennirl	1224..	120 00		
G. F. Renfro	1303..	85 00		
				1,063 59
Horses for cavalry and artillery:				
1883—D. Karl	4201			129 00
Pay, &c., of the Army:				
1881—Several payees	4359..	173 81		
1883—A. M. Juergens	1639..	18 89		
Several payees	5553 .	100 00		
1884—W. C. Forbush	839..	64 10		
Geo. M. Lewis	1409..	2 02		
Chas. N. W. Cunningham	1679..	82 59		
Catharine D. Hewit	1848..	66 12		
				507 53
Claims of loyal citizens for supplies:				
1879—J. Gill	1568..	235 00		
1881—D. Read	2740..	450 00		
K. Mitchell	428..	115 00		
I. J. Fouche	2673..	1,457 50		
				2,257 50
Refugees, freedmen, and abandoned lands:				
1881—D. C. Waddell	2896..			1 00
Allowance for reduction of wages under the eight-hour law:				
1881—T. O. Donald	3586..			1 44
Claims for quartermaster stores and commissary supplies:				
1881—J. Jelley	3688..	34 80		
R. S. Clark	3695..	31 50		
E. Reemer	4029..	3 00		
E. Hatcher	2003..	21 42		
J. Robertson	2086..	150 00		
J. Entrekin	2095..	36 00		
N. J. Taylor	2715..	60 00		
M. Bower	2853..	10 00		
1882—J. C. Brooke	1378..	110 00		
W. Blurton	1414..	175 00		
J. K. Means	1427..	15 90		
W. B. Morris	1467..	130 00		
C. A. Gill	1496..	12 00		
Mrs. J. O'Laughlin	1520..	62 30		
J. T. Tucker	1524..	16 00		
A. Byers	1593..	25 50		
J T. Marbury	1615..	140 00		
I. L. Davault	1640..	6 00		
F. Daverney	1694..	52 50		
E. A. Joseph and others	1748..	34 57		
P. Whitaker	1910..	82 50		
S. J. Waful	1919..	16 00		
S. Judd	2065..	110 00		
W. A. Douglas	2181..	32 50		
E. Golden	2359..	25 45		
Carried forward		1,392 94	3,740,740 39	

1883-'84. OUTSTANDING WARRANTS.

WAR DEPARTMENT—continued.

Brought forward			$1,392 94 $3,740,740 39
Claims for quartermaster stores and commissary supplies—Continued.			
1882—J. J. Pulliam	2564..	3,020 00	
E. Meredith	2581..	152 50	
J. A. Porter	2654..	537 50	
H. W. Peter	2663..	75 00	
W. A. Troxel	2760..	30 00	
R. Tinsley	2761..	31 00	
J. S. Humphreys and others	2731..	543 00	
W. R. Campbell	3191..	9 94	
W. S. Doughty	5377..	30 00	
1883—W. J. Boyd	2370..	34 25	
M. Looney	2387..	36 00	
H. Alcorn	2463..	100 00	
J. Bates	2512..	11 00	
D. Cannaday	2555..	50 00	
H. M. Bridgwater	2598..	130 00	
W. A. Walker	2608..	7 40	
R. Alsop	2617..	40 00	
T. Adams	2618..	37 80	
L. Warren	2689..	25 00	
C. W. Burns	2697..	33 60	
M. Thompson	2705..	9 00	
W. J. Hartley	2788..	123 00	
S. Beams	2790..	1 42	
J. R. Cassell	2796..	96 72	
W. Quinan	2798..	6 00	
W. L. Carr	2825..	245 00	
J. Bramff	2880..	125 00	
T. H. Montgomery	2911..	12 50	
N. Lawson	2962..	54 80	
H. Grash	2965..	17 43	
J. Park	2966..	102 39	
A. O. Daniel	2967..	39 15	
E. Ransmier	3022..	25 00	
J. Pollock	3084..	145 00	
H. Rhodes	3129..	7 25	
A. and D. E. Krise	3156..	20 00	
J. Moore	3208..	30 00	
J. Hill	3255..	3 00	
J. C. Helms	3282..	43 00	
J. Spratt	3392..	80 00	
J. J. Neeley	3393..	105 00	
I. S. Williams	3400..	100 00	
L. C. Cookerley	3402..	30 00	
M. L. Peck	3467..	128 00	
W. H. Johnson	3597..	125 00	
E. B. Stewart	3642..	14 50	
E. S. Woods	3672..	14 40	
M. Haun	3706..	120 00	
A. Roach	3748..	9 00	
H. Trobaugh	3757..	6 00	
A. Stacey	3853..	45 00	
P. Hendrickson	3858..	23 47	
E. Payne	3868..	20 00	
L. Smith	3872..	135 00	
D. W. Fuller	3899..	80 00	
J. B. Kyte	3908..	125 00	
G. W. Holman	3942..	205 00	
J. J. Birdsong	3968..	315 00	
B. Shearer	4036..	125 00	
E. S. Steadman	4037..	125 00	
J. Bittner	4076..	140 00	
J. Harp	4247..	8 50	
B. Clemons	4248..	5 00	
O. P. Nelson	4251..	3 00	
E. Johnson	4254..	20 00	
E. Priestley	4256..	9 00	
A. R. Thomas	5029..	560 00	
1884—W. Martin	1786..	125 00	
			10,233 96
Construction and repairs of hospitals:			
1881—C. A. Sewall	3742..		3 00
Construction of fortifications:			
1882—Ann Price	246..	49 00	
1883—J. Webb	1590..	8 91	
			57 91
Clothing, and camp and garrison equipage:			
1883—J. Q. Adams	4273..		99
Compensation to members Company B, Fourteenth Infantry:			
1883—G. Ilges	5926..		5,643 54
Carried forward			3,756,679 79

1883–'84. OUTSTANDING WARRANTS.

WAR DEPARTMENT—continued.

Brought forward			$3,756,679 79
Services and supplies, Montana Volunteers:			
1882—W. Preston	5598..	75 00	
H. Klumcar	6596..	7 00	
G. H. Stomer	6598..	7 00	
W. H. Camps	6603..	7 00	
S. Hansworth	6605..	7 00	
G. W. Mooney	6606..	7 00	
T. M. Loury	6608..	7 00	
T. Mitchell	6610..	7 00	
N. L. Turner	6611..	7 00	
1883—Geo. Hubbard	13..	12 00	
A. Brown	66..	2 00	
B. V. Walters	67..	7 00	
E. Stevens	69..	6 00	
F. Walters	70..	6 00	
W. Kane	71..	6 00	
A. Grimes	73..	6 00	
W. Brum	75..	6 00	
A. S. Shellaberger	200..	11 00	
H. Sermon	201..	11 00	
J. Scul!ey	203..	2 00	
J. Buckland	215..	11 00	
C. Chadwick	217..	11 00	
H. Fishback	220..	11 00	
J. F. Hart	222..	11 00	
J. Harkness	223..	11 00	
S. Neal	641..	10 00	
C. S. Davis	682..	10 00	
I. N. Clark	687..	10 00	
C. E. Deauvale	688..	10 00	
W. Preston	690..	10 00	
P. H. Estes	691..	10 00	
E. Woolsey	977..	10 00	
N. Welch	980..	10 00	
J. Morrison	984..	10 00	
C. Davis	987..	10 00	
W. Had	989..	10 00	
D. Walters	1000..	5 00	
J. Thompson	1002..	17 00	
P. Chuck	1009..	5 00	
I. Beattie	1011..	5 00	
J. D. Shean	1012..	5 00	
S. C. Dunham	1013..	21 00	
C. Barbour	1016..	2 00	
M. Duncan	1018..	5 00	
A. Liflin	1029..	5 00	
P. Hanton	1033..	5 00	
E. Hamil	1034..	5 00	
W. S. Hall	1035..	17 00	
N. B. Leter	1674..	28 00	
M. Wright	1686..	28 00	
W. Brown	1687..	28 00	
J. O. Clark	1702..	28 00	
A. Anderson	1968..	32 00	
J. Arthur	4081..	8 00	
Thomas Baer	4087..	8 00	
G. Calderwood	4088..	8 00	
J. Duffy	4089..	8 00	
A. Fisher	4091..	8 00	
H. Gilbert	4092..	8 00	
H. Harton	4093..	8 00	
J. W. Merrill	4099..	8 00	
N. B. Ringling	4103..	8 00	
T. Ryan	4104..	8 00	
G. Trimmings	4105..	8 00	
L. M. Johnson	4108..	21 00	
C. Danvale	4114..	3 00	
J. Armeaux	4118..	3 00	
C. D. Ladd	4119..	3 00	
J. O'Brien	4120..	3 00	
George Doll	4144..	19 00	
R. H. Mason	4147..	19 00	
W. B. Judd	4150..	19 00	
M. H. Gilbert	4156..	15 00	
A. Heath	4161..	9 00	
E. Legsbee	4167..	10 00	
R. Loratta	4168..	10 00	
T. Beebe	4170..	6 00	
D. Mosburg	4171..	10 00	
J. Thomas	4172..	10 00	
R. Johnson	4175..	6 00	
Carried forward		866 00	3,756,679 79

1883-'84. OUTSTANDING WARRANTS.

WAR DEPARTMENT—continued.				
Brought forward			$866 00	$3,756,679 79
Services and supplies, Montana Volunteers—Continued.				
1883—C. Complanville	4182..		6 00	
L. Whitford	4183..		10 00	
				882 00
Suppressing Modoc Indian hostilities:				
1883—Benson Walton	5292..		14 03	
Jesse D. Walker	5438..		14 03	
				28 06
Fifty per centum Army transportation due land-grant railroads:				
1883—Pensacola and two other railroad companies	6684			783 75
Signal Service, medical department:				
1884—F. D. Mount	1304			6 00
Signal Service, transportation:				
1884—Galveston, Harrisburg and San Antonio Ry	1342			2 75
Mileage:				
1884—H. W. Lawton	1789			58 72
Improving harbor at Charleston, S. C.:				
1884—Estate James G. Bennett	1760			24 00
Improving harbor at Plattsburg, N. Y.:				
1884—Estate James G. Bennett	1760			115 20
Improving harbor at Oswego, N. Y.:				
1884—Estate James G. Bennett	1760			158 40
Improving harbor at Boston, Mass.:				
1884—Estate James G. Bennett	1760			79 20
Improving harbor Block Island, R. I:				
1884—Estate James G. Bennett	1760			163 20
Improving Tennessee River below Chattanooga:				
1884—Estate J. G. Bennett	1760			50 40
Improving Taunton River:				
1884—Estate J. G. Bennett	1760			144 00
Improving Providence River and Narragansett Bay, R. I:				
1884—Estate J. G. Bennett	1760			88 80
Improving Pautucket River, R. I:				
1884—Estate J. G. Bennett	1760			88 80
Improving Connecticut River, Conn				31 20
NAVY DEPARTMENT.				
Pay of the Navy:				
1881—F. Huxley	1627..		15 30	
1882—Ming Kee & Co	213..		21 00	
1883—S. Caterlie	1542..		2 30	
G. R. Watkins	437..		1 00	
Chan Loh Cheng	474..		19 30	
A. Foster	700..		3 23	
1884—Mary Bevans	158..		4 85	
Peter Bevans	159..		4 85	
Charlotte L. Noes	263..		100 00	
Ah Song	812..		45 90	
Ah Foo	813..		32 97	
Ah Hong	814..		16 83	
Ah Jack	830..		40 18	
Pierre Xavier Mugabure	832..		635 80	
A. Fung	1079..		23 39	
Thomas McLellan	1081..		60 06	
A. H. McCormick	1181..		212 80	
L. L. Gwyn	1213..		176 00	
Ernest Mitchell	1351..		69 82	
John Henricks	1352..		169 19	
Mathew Franciscovitch	1353..		20 01	
Ah Fat	1354..		169 69	
				1,844 47
Pay miscellaneous:				
1884—L. W. Curtis	337..		123 52	
Edward O'C. Acker	577..		247 04	
J. R. Martin	748..		238 38	
				608 94
Pay Marine Corps:				
1884—Adolph Butz	839..		15 19	
Owen Woods	870..		122 42	
				137 61
Contingent, Marine Corps:				
1883—G. F. Gilbert	1932			2 02
Provisions, Marine Corps:				
1884—Adolph Butz	839..		26 00	
Owen Woods	870 .		26 00	
				52 00
Relief of persons impressed in naval service:				
1881—M. Killinger	551..		798 30	
W. H. Hill	552..		935 60	
Carried forward			1,733 90	3,762,029 31

1883–'84. OUTSTANDING WARRANTS.

NAVY DEPARTMENT—continued.

Brought forward		$1,733 90	$3,762,029 31
Relief of persons impressed in naval service—Continued.			
1881—W. B. Cliff	555..	4,183 60	
J. Peake	938..	775 80	
			6,693 30
Construction and repair:			
1883—Margaret Sunquest	1853		10 00
Contingent, ordnance:			
1884—Robert Craven	796		50
Indemnity for lost clothing:			
1884—Ah Song	812..	60 00	
Ah Foo	813..	60 00	
Ah Hong	814..	60 00	
Ah Jack	830..	10 32	
Ah Fung	1079..	60 00	
Thomas McLelland	1081..	60 00	
John Morris	1083..	60 00	
Ernest Mitchell	1351..	60 00	
John Hendricks	1352..	60 00	
Matthew Franciscovitch	1353..	60 00	
Ah Fat	1354..	60 00	
			610 32
General account of advances:			
1884—H. E. Drury	339		10,000, 00
Total outstanding warrants			3,779,343 43

Statement exhibiting the balances of appropriations unexpended June 30, 1883, and of the appropriations, expenditures, and the amounts carried to the surplus fund during the fiscal year ending June 30, 1884, together with the unexpended balances on June 30, 1884, which are to be accounted for in the next annual statement.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
TREASURY.										
Salaries and mileage of Senators	1884	22	531-2		$413,000 00	$46,986 20	$459,986 20	$456,644 70		$3,341 50
Do	1883					1,627 94	1,627 94			1,627 91
Do	1882			$2,674 34			2,674 34		$2,674 34	
Salaries of officers and employés of Senate	1884	22	532		276,044 60	422 34	276,466 94	271,914 80		4,552 14
Do	1883			4,129 78			4,129 78			4,129 78
Do	1882			3,351 68			3,351 68		3,351 68	
Contingent expenses of Senate, clerks to committees, and pages	1883			3,195 40			3,195 40			3,195 40
Do	1882			498 00			498 00		498 00	
Contingent expenses of Senate, stationery and newspapers	1884	22	533		15,500 00		15,500 00	15,500 00		
Do	1883			215 10		104 72	319 82	319 82		
Contingent expenses of Senate, horses and wagons	1884	22	533		3,500 00	208 23	3,708 23	3,708 23		
Do	1883					766 29	766 29			766 29
Contingent expenses of Senate, fuel for heating apparatus	1884	22	533		7,000 00		7,000 00	7,000 00		
Do	1883					17 68	17 68			17 68
Contingent expenses of Senate, furniture and repairs	1884	22	533		10,000 00	547 25	10,547 25	10,547 25		
Do	1883					141 43	141 43	4 50		136 93
Do	1882			05			05		05	
Contingent expenses of Senate, packing boxes	1884	22	533		770 00		770 00	670 00		100 00
Contingent expenses of Senate, folding documents	1884	22	533		2,500 00		2,500 00	2,500 00		
Contingent expenses of Senate, pay of folders	1883			1,040 35			1,040 35			1,040 35
Do	1882			90 00			90 00		90 00	
Contingent expenses of Senate, material for folding	1884	22	533		4,500 00	121 20	4,621 20	4,621 20		
Contingent expenses of Senate, expenses of special and select committees	1884	22 23	533 269		50,000 00	10,873 41	60,873 41	60,870 08		3 33
Do	1883			24,000 00		8 40	24,008 40	218 50		23,789 90
Do	1882			24,631 93			24,631 93		24,631 93	
Contingent expenses of Senate, miscellaneous items	1884	22	533		10,000 00	61 51	10,061 51	10,061 51		

Do	1883					6 08	6 08			6 08
Do	1882			1,811 84			1,811 84			1,811 84
Contingent expenses of Senate, salaries of Capitol police	1884	22	534		18,300 00		18,300 00	18,207 80		92 20
Do	1883			18 60			18 60			18 60
Do	1882			2 50			2 50		2 50	
Contingent expenses of Senate, uniforms for Capitol police	1883			272 98			272 98			272 98
Contingent expenses of Senate, Capitol police, contingent fund	1884	22	534		50 00		50 00	18 00		32 00
Do	1883			26 00			26 00			26 00
Do	1882			30 00			30 00		30 00	
Reporting proceedings and debates, Senate	1884	22	533		25,000 00		25,000 00	25,000 00		
Postage, Senate	1884	22	533		300 00		300 00	300 00		
Do	1883			100 00			100 00			100 00
Expenses of preparing and compiling Congressional Directory	1884	22	534		1,200 00		1,200 00	1,200 00		
Investigation of epidemic diseases, joint resolution, December 21				14,687 75			14,687 75			14,687 75
Payment to S. H. Colbath, messenger, Senate	1878			118 70			118 70			118 70
Payment to legal representatives of Hon. George S. Houston				5,860 60			5,860 60	5,860 60		
Payment to Charles L. Jones, messenger, Senate		23	90		465 65		465 65	465 65		
Salaries and mileage of Members and Delegates, House of Representatives	1884	22	534		1,805,624 00	112 00	1,805,736 00	1,735,732 31		70,003 69
Do	1883			148,885 64		3,063 62	151,949 26	131,663 50		20,285 76
Do	1882			8,385 17			8,385 17			8,385 17
Salaries of officers and employés of House of Representatives	1884	22	534		364,028 20		364,028 20	357,359 06		6,669 14
Do	1883			4,853 98			4,853 98			4,853 98
Do	1882			746 17			746 17			746 17
Do	1879*			2 30			2 30			2 30
Contingent expenses, House of Representatives, clerks to committees	1882			5,940 00			5,940 00		5,940 00	
Contingent expenses, House of Representatives, stationery and newspapers	1884	22	536		47,500 00	2,457 96	49,957 96	49,957 96		
Do	1883			221 78		98 11	319 89	1 00		318 89
Do	1882			731 56			731 56			731 56
Contingent expenses, House of Representatives, furniture and repairs	1884	22	536		10,000 00		10,000 00	10,000 00		
Do	1883					2,777 68	2,777 68			2,777 68
Do	1882			1,315 90			1,315 90			1,315 90
Contingent expenses, House of Representatives, fuel for heating apparatus	1884	22	536		7,000 00	2,756 72	9,756 72	9,756 72		
Do	1883					198 53	198 53			198 53
Do	1882			571 32			571 32		571 32	
Carried forward				258,409 42	3,072,282 45	73,357 30	3,404,049 17	3,190 103 19	37,789 82	176,156 16

* And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
TREASURY—continued.										
Brought forward	.....	.....	.....	$258,409 42	$3,072,282 45	$73,357 30	$3,404,049 17	$3,190,103 19	$37,789 82	$176,156 16
Contingent expenses House of Representatives, pages	1882	.....	.....	274 99	.....	.....	274 99	.....	274 99	.....
Contingent expenses House of Representatives, pay of folders	1882	.....	.....	36 01	.....	.....	36 01	.....	36 01	.....
Contingent expenses House of Representatives, materials for folding	1884	22	536	.....	16,000 00	18 00	16,018 00	16,018 00	.....	.....
Do	1883	.....	.....	.....	.....	291 33	291 33	.....	.....	291 33
Do	1882	.....	.....	3 48	.....	.....	3 48	.....	3 48	.....
Contingent expenses House of Representatives, miscellaneous items	1884	22 23	536, 633 270	.....	52,920 00	1,022 69	53,942 69	53,634 68	.....	308 01
Do	1883	.....	.....	.....	.....	379 73	379 73	340 19	.....	39 54
Do	1882	.....	.....	6,764 89	.....	.....	6,764 89	.....	.....	6,764 89
Contingent expenses House of Representatives, packing boxes	1884	22	536	.....	2,987 00	.....	2,987 00	2,987 00	.....	.....
Contingent expenses House of Representatives, cartage	1884	22	536	.....	600 00	.....	600 00	600 00	.....	.....
Contingent expenses House of Representatives, salaries Capitol police	1884	22	534	.....	18,300 00	.....	18,300 00	18,299 76	.....	24
Do	1883	.....	.....	18 17	.....	.....	18 17	.....	.....	18 17
Do	1882	.....	.....	22	.....	.....	22	.....	22	.....
Contingent expenses House of Representatives, Capitol police contingent fund	1884	22	534	.....	50 00	.....	50 00	.....	.....	50 00
Do	1882	.....	.....	50 00	.....	.....	50 00	.....	50 00	.....
Contingent expenses House of Representatives, uniforms for Capitol police	1883	.....	.....	.....	.....	1 00	1 00	.....	.....	1 00
Postage, House of Representatives	.....	22	536	.....	550 00	.....	550 00	550 00	.....	.....
Investigation of epidemic diseases, House of Representatives	.....	.....	.....	17,006 93	.....	.....	17,006 93	.....	.....	17,006 93
Payment to widow of Hon. J. W. Shackelford	.....	.....	.....	730 29	.....	.....	730 29	.....	.....	730 29
One month's extra pay to officers and employés, House of Representatives	.....	.....	.....	108 33	.....	.....	108 33	.....	.....	108 33
Digest of contested election cases, House of Representatives	.....	.....	.....	1,000 00	.....	.....	1,000 00	1,000 00	.....	.....
Payment Henry H. Smith, Journal clerk, House of Representatives	.....	.....	.....	.....	.....	500 00	500 00	.....	.....	500 00

Payment J. J. McElhone, official reporter, House of Representatives		23	266		1,000 00		1,000 00	1,000 00		
Payment Frank Galt, assistant Journal clerk, House of Representatives		23	89		492 00		492 00	492 00		
Payment widow of Hon. E. W. M. Mackey		23	18		5,586 67		5,586 67	5,586 67		
Payment mother of Hon. W. F. Pool		23	18		7,737 66		7,737 66	7,737 66		
Payment widow of Hon. T. H. Herndon		23	18		8,875 00		8,875 00	8,875 00		
Payment Alexander B. Thomas and Wilson Grice, House of Representatives		23	18		1,080 00		1,080 00	1,080 00		
Payment widow of Hon. D. C. Haskell		23	18		6,715 97		6,715 97	6,715 97		
Payment Hon. W. E. Cutts		23	18		7,652 38		7,652 38			7,652 38
Salary of the President	1884	22	537		50,000 00		50,000 00	50,000 00		
Salary of the Vice-President	1884	22	537		8,000 00		8,000 00	3,000 00		5,000 00
Do	1883			5,991 63			5,991 63	991 63		5,000 00
Do	1882			4,062 51			4,062 51		4,062 51	
Salary of the Executive Office	1884	22	537		36,064 00		36,064 00	36,064 00		
Do	1883					1,102 90	1,102 96			1,102 96
Contingent expenses Executive Office	1884	22	537		8,000 00		8,000 00	8,000 00		
Do	1883					4 06	4 06			4 06
Do	1882			6 86			6 86		6 86	
Promoting the efficiency of the civil service				30,000 00			30,000 00	795 30		29,204 70
Preventing the spread of epidemic diseases				143,393 57		79 00	143,472 57	55,046 54		88,426 03
Salaries Civil Service Commission	1884	22	537		17,300 00		17,300 00	17,300 00		
Do	1883			1,314 80		63 60	1,378 40			1,378 40
Traveling expenses Civil Service Commission	1884	22	537		5,000 00		5,000 00	5,000 00		
Do	1883			3,500 00		2,025 50	5,525 50			5,525 50
Salaries office of Public Printer	1884	22	536		15,300 00		15,300 00	15,300 00		
Contingent expenses office of Public Printer	1884	22	536		3,000 00		3,000 00	2,000 00		1,000 00
Do	1883			200 00			200 00	197 95		2 05
Do	1882			23 45			23 45		23 45	
Repairs Government Printing Office	1884	22	630		12,500 00		12,500 00	12,360 17		139 83
Publication of the Tenth Census reports				541,448 51			541,448 51	295,859 24		245,589 27
Printing Annual Report (1881) of Commissioner of Agriculture				67,756 47		804 52	68,560 99	28,490 09		40 070 90
Printing Annual Report (1883) of Commissioner of Agriculture				220,000 00			220,000 00	92,227 15		127,772 85
Publication of information in aid of societies of the Red Cross				950 57		43 79	994 36	950 57		43 79
Printing report of Committee on Transportation Routes to the Seaboard				1,120 78			1,120 78			1,120 78
Printing and binding first and second volumes Catalogue of Library of Surgeon-General's Office				2,628 95			2,628 95			2,628 95
Printing and binding third volume Catalogue of Library of Surgeon-General's Office				1,585 50			1,585 50	1,504 85		80 65
Removal and storage of certain material, Government Printing Office				4,000 00			4,000 00	2,000 00		2,000 00
Public printing and binding	1884	22	629		2,500,000 00	120,062 37	2,620,062 37	2,293,185 62		326,876 75
Do	1883			232,205 49		51,843 74	284,049 23	249,658 53		34,390 70
Carried forward				1,544,591 82	5,857,993 13	251,599 59	7,654,184 54	6,484 951,76	42,247 34	1,126,985 44

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
TREASURY—continued.										
Brought forward				$1,544,591 82	$5,857,993 13	$251,599 59	$7,654,184 54	$6,484,951 76	$42,247 34	$1,126,985 44
Public printing and binding	1882			69,937 46			69,937 46	8,083 30		61,854 16
Do	1881*					44 07	44 07		44 07	
Do	1878			19 33			19 33			19 33
Salaries Library of Congress	1884	22	537		36,640 00		36,640 00	36,640 00		
Do	1882			40 00			40 00		40 00	
Increase, Library of Congress	1884	22	537		13,000 00		13,000 00	13,000 00		
Contingent expenses	1884	22	537		1,500 00		1,500 00	1,500 00		
Works of art for the Capitol				10,000 00			10,000 00	8,000 00		2,000 00
Publishing historical documents relating to early French discoveries in Northwest and on the Mississippi		17	513		1,418 00		1,418 00	1,418 00		
Purchase of military papers, maps, &c., of the Count de Rochambeau				20,000 00			20,000 00	20,000 00		
Purchase of Matthew H. Carpenter's records and briefs in Supreme Court cases				8,000 00			8,000 00	8,000 00		
Salaries Botanic Garden	1884	22	537		11,700 00		11,700 00	11,700 00		
Improving Botanic Garden	1884	22	632		10,000 00		10,000 00	10,000 00		
Salaries judges, &c., Court of Claims	1884	22	563		29,840 00		29,840 00	29,436 49		403 51
Do	1883			2,115 49			2,115 49			2,115 49
Do	1882			2,250 00			2,250 00		2,250 00	
Contingent expenses Court of Claims	1884	22	563		3,000 00		3,000 00	3,000 00		
Do	1883					80 78	80 78			80 78
Reporting decisions, &c., Court of Claims	1884	22	563		1,000 00		1,000 00	1,000 00		
Payment of judgments, Court of Claims				38,452 77			38,452 77	33,999 55		4,453 22
Salaries office of Secretary of the Treasury	1884	22	538–9		494,121 25		494,121 25	494,121 25		
Do	1882					669 19	669 19		669 19	
Salaries office Supervising Architect	1884	22	539		19,420 00		19,420 00	19,420 00		
Do	1882					36 95	36 95		36 95	
Salaries office of Secret Service Division	1884	22	542		12,980 00		12,980 00	12,980 00		
Do	1883					247 87	247 87			247 87
Salaries office of Supervising Surgeon-General Marine Hospital Service	1884			28,840 00			28,840 00	28,840 00		
Salaries office of Supervising Inspector-General Steamboat Inspection Service	1884			10,140 00			10,140 00	10,140 00		
Do	1883			167 67			167 67			167 67
Salaries office of Standard Weights and Measures	1884	22	543		5,978 50		5,978 50			5,978 50

Contingent expenses office of Standard Weights and Measures	1884	22	543		1,200 00		1,200 00			1,200 00
Salaries office of First Comptroller	1884	22	539		83,020 00		83,020 00	83,020 00		
Do	1883					2,023 70	2,023 70			2,023 70
Do	1882			165 99			165 99		165 99	
Salaries office of Second Comptroller	1884	22	539–40		110,920 00		110,920 00	110,920 00		
Do	1883					2,969 35	2,969 35			2,969 35
Do	1882			137 15			137 15		137 15	
Additional clerks adjusting accounts of Soldiers' Home				5,000 00			5,000 00	5,000 00		
Salaries office of Commissioner of Customs	1884	22	540		51,630 00		51,630 00	51,630 00		
Do	1883					467 95	467 95			467 95
Do	1882			10 23			10 23		10 23	
Salaries office of First Auditor	1884	22	540		83,410 00		83,410 00	83,410 00		
Do	1883					441 44	441 44			441 44
Do	1882			42			42		42	
Salaries office of Second Auditor	1884	22	540		244,690 00		244,690 00	244,690 00		
Do	1883			5,812 05		5,396 69	11,208 74			11,208 74
Do	1882			133 94			133 94		133 94	
Salaries office of Third Auditor	1884	22	540		228,410 00		228,410 00	228,410 00		
Do	1883					10,008 84	10,008 84	40 22		9,968 62
Do	1882			353 40			353 40		353 40	
Salaries office of Fourth Auditor	1884	22	540		69,390 00		69,390 00	69,390 00		
Do	1883					211 27	211 27			211 27
Do	1882			52			52		52	
Salaries office of Fifth Auditor	1884	22	540		47,610 00		47,610 00	47,610 00		
Do	1883					2,651 13	2,651 13	55 00		2,596 13
Do	1880			6 21			6 21		6 21	
Salaries office of Sixth Auditor	1884	22	540–1		402,710 00	7,550 83	410,260 83	410,260 53		30
Do	1883			6,029 18		699 64	6,728 82			6,728 82
Do	1882			7 68			7 68		7 68	
Salaries office of Treasurer United States	1884	22	541		275,000 00		275,000 00	275,000 00		
Do	1883					2,945 96	2,945 96			2,945 96
Do	1882			171 74			171 74		171 74	
Salaries office of Treasurer United States (national currency reimbursable)	1884	22	541		72,060 00		72,060 00	72,060 00		
Do	1883					3,359 21	3,359 21			3,359 21
Do	1882			1,827 94			1,827 94		1,827 94	
Salaries office of Register	1884	22	541		183,610 00		183,610 00	182,000 00		1,610 00
Do	1883			1,290 02			1,290 02	74 18		1,215 84
Do	1882			341 98			341 98		341 98	
Salaries office of the Light-House Board	1884	22	542		†42,120 00		42,120 00	42,120 00		
Do	1883					1,037 85	1,037 85			1,037 85
Do	1882			179 15			179 15		179 15	
Salaries office of Commissioner Internal Revenue	1884	22	543		299,190 00		299,190 00	299,190 00		
Do	1883					1,909 19	1,909 19	146 14		1,763 05
Carried forward				1,756,022 14	8,693,560 88	294,351 50	10,743,934 52	9,441,256 42	48,623 90	1,254,054 20

*And prior years.

†Brought from customs ledger.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
TREASURY—continued.										
Brought forward	.....	.....	.....	$1,756,022 14	$8,693,560 88	$294,351 50	$10,743,934 52	$9,441,256 42	$48,623 90	$1,254,054 20
Salaries office of Commissioner Internal Revenue (reimbursable)	1884	22	543	.....	.....	.....	5,900 00	2,500 00	.....	.....
Do	1883	.....	.....	.....	5,900 00	135 57	135 57	.....	.....	3,400 00
Salaries Bureau of Statistics	1884	22	542	.....	50,500 00	.....	50,500 00	50,500 00	.....	135 57
Do	1883	.....	.....	.....	.....	334 15	334 15	.....	.....	334 15
Do	1882	.....	.....	56 87	.....	.....	56 87	.....	56 87	.....
Salaries office Life-Saving Service	1884	22	542	.....	32,880 00	.....	32,880 00	32,880 00	.....	.....
Do	1882	.....	.....	.....	.....	3 26	3 26	.....	3 26	.....
Salaries office Comptroller of the Currency	1884	22	541	.....	103,120 00	.....	103,120 00	103,120 00	.....	.....
Do	1883	.....	.....	.....	.....	557 99	557 99	.....	.....	557 99
Do	1882	.....	.....	1 12	.....	.....	1 12	.....	1 12	.....
Salaries office Comptroller of the Currency (national currency reimbursable)	1884	22	542	.....	16,820 00	180 00	17,000 00	17,000 00	.....	.....
Do	1883	.....	.....	.....	.....	27 44	27 44	.....	.....	27 44
Do	1882	.....	.....	178 50	.....	.....	178 50	.....	178 50	.....
Contingent expenses Treasury Department, stationery	1884	22	543	.....	35,000 00	42,976 48	77,976 48	73,629 60	.....	4,346 88
Do	1883	.....	.....	10,619 26	.....	3,873 04	14,492 30	3,696 50	.....	10,795 80
Do	1882	.....	.....	21,861 10	.....	.....	21,861 10	.....	21,861 10	.....
Contingent expenses Treasury Department, file-holders and cases	1884	22	544	.....	10,000 00	.....	10,000 00	7,500 00	.....	2,500 00
Do	1883 / 1884	}	.....	3,000 00	.....	.....	3,000 00	3,000 00	.....	.....
Contingent expenses Treasury Department, binding, newspapers, &c	1884	22	543	.....	2,600 00	.....	2,600 00	2,600 00	.....	.....
Do	1883	.....	.....	.....	.....	1 50	1 50	.....	.....	1 50
Do	1882	.....	.....	.....	.....	632 02	632 02	.....	632 02	.....
Contingent expenses Treasury Department, investigation of accounts and traveling expenses	1884	22	543	.....	1,500 00	.....	1,500 00	1,500 00	.....	.....
Do	1883	.....	.....	.....	.....	138 41	138 41	138 41	.....	.....
Do	1882	.....	.....	36 13	.....	.....	36 13	.....	36 13	.....
Contingent expenses Treasury Department, freights, telegrams	1884	22	544	.....	4,000 00	.....	4,000 00	4,000 00	.....	.....
Do	1882	.....	.....	1 60	.....	.....	1 60	.....	1 60	.....
Contingent expenses Treasury Department, rent	1884	22	544	.....	9,000 00	.....	9,000 00	9,000 00	.....	.....
Do	1882	.....	.....	.....	.....	75 00	75 00	.....	75 00	.....

Contingent expenses Treasury Department, horses and wagons	1884	22	544		5,000 00		5,000 00	5,000 00		
Do	1882					193 60	193 60		193 60	
Contingent expenses Treasury Department, ice	1884	22	544		4,000 00		4,000 00	4,000 00		
Do	1882			58 86			58 86		58 86	
Contingent expenses Treasury Department, fuel, &c	1884	22	544		14,000 00		14,000 00	14,000 00		
Do	1883					7 00	7 00			7 00
Do	1882					22 41	22 41		22 41	
Contingent expenses Treasury Department, gas, &c	1884	22	544		14,000 00		14,000 00	14,000 00		
Do	1883					2 52	2 52			2 52
Do	1882			228 13			228 13		228 13	
Contingent expenses Treasury Department, carpets and repairs	1884	22	544		8,000 00		8,000 00	8,000 00		
Do	1882			7 96			7 96		7 96	
Contingent expenses Treasury Department, furniture, &c	1884	22	544		20,000 00		20,000 00	20,000 00		
Do	1883					250 55	250 55			250 55
Do	1882					138 98	138 98		138 98	
Contingent expenses Treasury Department, miscellaneous items	1884	22	544		10,000 00	68 12	10,068 12	10,068 12		
Do	1883					62 14	62 14	28 75		33 39
Do	1882			79 09			79 09		79 09	
Postage, Treasury Department	1884	22	543,563		21,500 00		21,500 00	20,188 23		1,311 77
Do	1883			21,245 86			21,245 86	91 51		21,154 35
Do	1882			21,174 08			21,174 08		21,174 08	
Postage to Postal Union countries, Treasury Department	1884	22	543		2,000 00		2,000 00	500 00		1,500 00
Do	1883			1,380 00			1,380 00			1,380 00
Do	1802			1,220 00			1,220 00		1,220 00	
Expenses of the national currency	1884	12	611		20,000 00	75 00	20,075 00	20,056 25		18 75
Do	1883			3,636 10		5,350 00	8,986 10	8,986 10		
Do	1882			139 41			139 41		139 41	
Distinctive paper for United States securities	1884	22	611		35,000 00	660 37	35,660 37	35,660 37		
Do	1882			83 51			83 51		83 51	
Redemption of worn and mutilated United States notes	1883			13,805 46			13,805 46	12,583 12		1,222 34
Do	1882			996 77		2 20	998 97	971 00	27 97	
Transportation of silver coin		22	15	16,548 40	5,000 00		21,548 40	13,282 53		8,265 87
Recoinage of gold and silver coins	1883			1,099 48			1,099 48	1,049 52		49 96
Loss on recoinage of minor coins	1884	22	611		1,000 00		1,000 00			1,000 00
Do	1883			762 41			762 41			762 41
Examination of national banks and bank plates	1884	22	542		2,000 00		2,000 00	500 00		1,500 00
Do	1883			1,500 00		208 35	1,708 35			1,708 35
Do	1882			1,470 00			1,470 00		1,470 00	
Collecting statistics relating to commerce	1884	22	542		5,000 00		5,000 00	2,000 00		3,000 00
Do	1883			3,675 04		344 32	4,019 36	3,675 04		344 32
Carried forward				1,880,887 28	9,131,380 88	350,671 92	11,362,940 08	9,946,961 47	96,313 50	1,319,665 11

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
TREASURY—continued.										
Brought forward				$1,880,887 28	$9,131,380 88	$350,671 92	$11,362,940 08	$9,946,961 47	$96,313 50	$1,319,665 11
Collecting statistics relating to commerce	1882			30 01			30 01		30 01	
Plans for public buildings	1884	22	612		2,500 00	1,998 60	4,498 60	3,000 00		1,498 60
Do	1883			649 50		226 53	876 03	875 78		25
Do	1882					50 75	50 75		50 75	
Vaults, safes, and locks for public buildings	1884	22	612		60,000 00		60,000 00	50,000 00		10,000 00
Do	1883			28,920 52			28,920 52	25,000 00		3,920 52
Do	1882			4,824 02			4,824 02		4,824 02	
Suppressing conterfeiting and other crimes	1884	22	612		67,000 00		67,000 00	60,123 05		6,876 95
Do	1883			1,682 26		538 81	2,221 07	1,682 26		538 81
Do	1882			690 35			690 35		690 35	
Examination of rebel archives and records of captured property	1882			2 49			2 49		2 49	
Lands and other property of the United States	1884	22	612		1,000 00		1,000 00	715 00		285 00
Do	1883					67 12	67 12	67 12		
Do	1882			16 65			16 65	5 00	11 65	
Propagation of food fishes	1884	22	628		197,000 00		197,000 00	181,178 33		15,821 67
Do	1883			299 26		8 30	307 56	307 56		
Do	1882			344 81			344 81			344 81
Illustration for Report on Food Fishes	1884	22	628		1,000 00		1,000 00	1,000 00		
Steam vessel, food fishes				10,000 00			10,000 00	10,000 00		
Fish-hatching establishment	1881 1882			19			19			19
Fish Commission buildings, Wood's Holl, Mass		22	628		25,000 00		25,000 00	25,000 00		
Expenses of inquiry respecting food fishes	1884	22	628		3,500 00		3,500 00	3,500 00		
Salaries and expenses of members of National Board of Health	1884	22	613		10,000 00	2,455 86	12,455 86	11,610 96		844 90
Salaries and expenses of National Board of Health				296,833 45		26,375 29	323,208 74	1,011 82		322,196 92
Do	1883					3,070 44	3,070 44			3,070 44
Salaries Bureau Engraving and Printing	1884	22	544		26,130 00	2,168 00	28,298 00	28,213 85		84 15
Do	1883					1,230 80	1,230 80			1,230 80
Do	1882					16 45	16 45		16 45	
Labor and expenses of engraving and printing	1884	22	606		485,700 00	459,460 99	945,160 99	933,233 78		11,927 21
Do	1883			1,385 88		33,353 95	34,739 83	34,607 73		132 10
Do	1882			1,574 59			1,574 59		1,574 59	

Purchase, &c., Louisville and Portland Canal				47,165 69			47,165 69	24,000 00		23,165 69
Expenses Smithsonian Institution		R. S.	3,689		42,180 00		42,180 00	42,180 00		
Outstanding liabilities				438,603 36		43,016 12	481,619 48	40,828 59		440,790 89
Contingent expenses national currency, reimbursable, office of Treasurer		18	372		78,097 15		78,097 15	78,097 15		
Coinage, standard silver dollars		20	25		136,963 51	83 18	137,046 69	137,046 69		
Descriptive catalogue of Government publications				5,744 01			5,744 01	5,695 89		48 12
Salaries and expenses of special inspectors of foreign steam vessels		22	347		37,596 05		37,596 05	37,596 05		
Statue of Chief-Justice Marshal				15,000 00			15,000 00	15,000 00		
Payment of surplus proceeds of lands sold for direct taxes				181,820 29			181,820 29	15,150 50		166,669 79
To promote the education of the blind				2,500 00		10,000 00	12,500 00	10,000 00		2,500 00
Books and serials for Government actuary				250 00			250 00	250 00		
North American Ethnology, Smithsonian Institution				39,625 00			39,625 00	39,625 00		
Polaris Report, Smithsonian Institution						1 22	1 22			1 22
Smithsonian Institution				448,358 49			448,358 49			448,358 49
Reconstructing eastern portion Smithsonian Institution				30,000 00			30,000 00	30,000 00		
Library, Treasury Department	1884	22	612		500 00		500 00	500 00		
Do	1883					30 93	30 93	2 00		28 93
Do	1882			132 03			132 03		132 03	
Refunding national debt, 4 per cent				102,074 32			102,074 32			102,074 32
Refunding national debt, 4½ per cent				8,802 46			8,802 46			8,802 46
Refunding national debt, 5 per cent				7,062 49			7,062 49			7,062 49
Monument to commemorate the battle of Monmouth, N. J				20,000 00			20,000 00	20,000 00		
Monument to Baron DeKalb, at Annapolis, Md				10,000 00			10,000 00			10,000 00
Monument to mark the birthplace of George Washington				25,925 00			25,925 00	2,207 70		23,717 30
Monument at Washington's headquarters, Newburg, N. Y				24,500 00			24,500 00			24,500 00
Monument to commemorate the Revolutionary battle of Bennington				40,000 00			40,000 00			40,000 00
Monument to Thomas Jefferson, at Monticello, Va						1,647 17	1,647 17			1,647 17
Erection of a monumental column at Yorktown, Va				81,391 86			81,391 86	25,000 00		56,391 86
Portrait of the late Benjamin H. Hill				600 00			600 00	500 00		100 00
Portrait of the late William M. Lowe				500 00			500 00	500 00		
Portrait of the late Godlove S. Orth				500 00			500 00	496 33		3 67
Portrait of the late J. T. Updegraff		22	638		498 78		498 78	498 78		
Portrait of the late Robert M. A. Hawk		22	639		578 20		578 20	578 20		
Portrait of the late John W. Shackleford		22	640		554 08		554 08	554 08		
Sinking fund, Union Pacific R. R. Co		20	56, 58–59	858,532 13	1,802,878 75		2,661,410 88	1,668,925 00		992,485 88
Carried forward				4,617,228 39	12,110,057 40	936,472 43	17,663,758 22	13,513,325 67	103,645 84	4,046,786 71

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
TREASURY—continued.										
Brought forward				$4,617,228 39	$12,110,057 40	$936,472 43	$17,663,758 22	$13,513,325 67	$103,645 84	$4,046,786 71
Sinking-fund, Central Pacific R. R. Co.		20	56, 58–59	846,263 48	242,896 30	541,800 00	1,630,959 78			1,630,959 78
Trust-fund interest for support of free schools in South Carolina		17	600	454 81	1,823 48		2,278 29	1,748 00		530 29
Memorial cards to accompany address on life of President Garfield				690 00			690 00			690 00
Draping public buildings at time of death of President Garfield				2,158 55			2,158 55			2,158 55
Awards for services and expenses in connection with illness and death of President Garfield				17,706 99			17,706 99			17,706 99
Expenses incurred under act relating to Chinese				2,325 50			2,325 50	1,382 80		942 70
Control and protection of property acquired under direct-tax laws	1884	22	613		500 00		500 00			500 00
Canceling and redeeming stamps, office Commissioner of Internal Revenue		23	2		20,000 00		20,000 00	20,000 00		
Mail transportation, Pacific Railroads	1882	20	420		158 07		158 07	158 07		
Do	1883	20	420		915,710 22		915,710 22	915,710 22		
Refunding to national banking associations excess of duty		14	572		156 25		156 25	156 25		
Relief of E. H. George and H. W. Walker		23	89		375 00		375 00	375 00		
Payment of decree in case of Spanish ferry-boat Nuestra Señora de Regla		23	15		148,203 00		148,203 00	148,203 00		
Salaries office assistant United States treasurer, Baltimore, Md	1884	22	544		21,600 00		21,600 00	21,600 00		
Do	1883			457 62		26 99	484 61			484 61
Salaries office assistant United States treasurer, Boston, Mass	1884	22	544		36,060 00		36,060 00	36,060 00		
Do	1883			76 71			76 71			76 71
Do	1882			441 70			441 70		441 70	
Salaries office assistant United States treasurer, Chicago, Ill	1884	22	544		21,400 00		21,400 00	21,364 78		35 22
Do	1883			187 79			187 79			187 79
Do	1882			08			08		08	
Salaries office assistant United States treasurer, Cincinnati, Ohio	1884	22	545		15,960 00		15,960 00	15,960 00		
Do	1883			87 13			87 13			87 13

Salaries office assistant United States treasurer, New York, N. Y.	1884	22	545		168,090 00		168,090 00	166,434 36		1,655 64
Do	1883			1,120 60		163 37	1,283 97			1,283 97
Do	1882			1,954 11			1,954 11		1,954 11	
Salaries office assistant United States treasurer, New Orleans, La	1884	22	545		14,090 00		14,090 00	14,090 00		
Do	1883			23 60			23 60			23 60
Salaries office assistant United States treasurer, Philadelphia, Pa	1884	22	545		35,100 00		35,100 00	35,100 00		
Do	1883					24 73	24 73			24 73
Do	1882			86 96			86 96		86 96	
Salaries office assistant United States treasurer, Saint Louis, Mo	1884	22	546		16,580 00		16,580 00	16,580 00		
Do	1883			161 63			161 63			161 63
Do	1882			17 71			17 71		17 71	
Salaries office assistant United States treasurer, San Francisco, Cal	1884	22	546	301 32	28,120 00		28,120 00	28,120 00		
Do	1883			1,776 40			301 32			301 32
Salaries office depositary at Tucson, Ariz	1882						1,776 40		1,776 40	
Salaries of special agents, independent treasury	1884	22	546	2,000 00	4,000 00		4,000 00	2,000 00		2,000 00
Do	1883			2,000 00		48 37	2,048 37			2,048 37
Do	1882					73 73	2,073 73		2,073 73	
Checks and certificates of deposit, independent treasury	1884	22	546	3,096 32	3,000 00		3,000 00	3,000 00		
Do	1883			276 39			276 39	2,728 35		367 97
Do	1882				75,000 00				276 39	
Contingent expenses, independent treasury	1884	22	611	23,377 07		884 35	75,884 35	59,073 51		16,810 84
Do	1883			21,678 19		106 55	23,483 62	7,855 15		15,628 47
Do	1882					2,866 89	24,545 08	46	24,544 62	
Constructing vaults, office assistant United States treasurer, San Francisco, Cal					27,380 00	150 00	150 00	149 25		75
Salaries office Director of the Mint	1884	22	546				27,380 00	27,380 00		
Do	1883			155 36		431 53	431 53			431 53
Do	1882						155 36		155 36	
Contingent expenses, office Director of the Mint	1884	22	546		8,200 00		8,200 00	6,191 55		2,008 45
Do	1883			1,706 88		326 54	2,080 42	1,031 93		998 49
Do	1882			342 82			342 82			342 82
Salaries, mint at Carson, Nev	1884	22	547		29,550 00		29,550 00	29,500 00		50 00
Wages of workmen, mint at Carson, Nev	1884	22	547		54,000 00		54,000 00	54,000 00		
Do	1883					5 44	5 44			5 44
Do	1882			763 00			763 00		763 00	
Contingent expenses, mint at Carson, Nev	1884	22	547		25,000 00		25,000 00	24,072 93		927 07
Do	1883			86 20		09	86 29	51 35		34 94
Do	1882			1,286 58			1,286 58		1,286 58	
Salaries, mint at Denver, Colo	1884	22	547		10,950 00		10,950 00	10,950 00		
Wages of workmen, mint at Denver, Colo	1884	22	547		12,000 00		12,000 00	12,000 00		
Do	1883			854 75			854 75			854 75
Do	1882			1,502 25			1,502 25		1,502 25	
Carried forward				5,552,643 89	14,045,959 72	1,483,381 01	21,081,984 62	15,196,352 63	138,524 73	5,747,107 26

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
TREASURY—continued.										
Brought forward				$5,552,643 89	$14,045,959 72	$1,483,381 01	$21,081,984 62	$15,196,352 63	$138,524 73	$5,747,107 26
Contingent expenses, mint at Denver, Colo	1884	22	547		6,000 00		6,000 00	5,417 62		582 38
Do	1883			3,906 59		254 92	4,161 51	1,239 28		2,922 23
Do	1882			1,712 75			1,712 75		1,712 75	
Salaries, mint at New Orleans, La	1884	22	547		31,950 00		31,950 00	31,950 00		
Do	1883					1,454 94	1,454 94			1,454 94
Do	1882			1,425 86			1,425 86		1,425 86	
Wages of workmen, mint at New Orleans, La	1884	22	547		74,000 00		74,000 00	74,000 00		
Do	1883					72	72			72
Do	1882			5 05			5 05		5 05	
Contingent expenses, mint at New Orleans	1884	22	547		35,000 00		35,000 00	35,000 00		
Do	1883					66 37	66 37			66 37
Do	1882			340 93			340 93		340 93	
Salaries, mint at Philadelphia, Pa	1884	22	546		41,550 00		41,550 00	41,550 00		
Do	1883					76 89	76 89			76 89
Do	1882			1,425 28			1,425 28		1,425 28	
Wages of workmen, mint at Philadelphia, Pa	1884	22	547		293,000 00		293,000 00	293,000 00		
Do	1883					8,062 87	8,062 87			8,062 87
Do	1882			73			73		73	
Contingent expenses of mint at Philadelphia	1884	22	547		100,000 00		100,000 00	99,925 92		74 08
Do	1883					75	75			75
Do	1882			62			62		62	
Salaries, mint at San Francisco, Cal	1884	22	547		43,400 00		43,400 00	43,400 00		
Do	1883			628 43		14 83	643 26			643 26
Wages of workmen, mint at San Francisco	1884	22	547		242,000 00	11,300 00	253,300 00	234,000 00		19,300 00
Do	1883			38 84		62 66	101 50			101 50
Do	1882			103 58			103 58		103 58	
Contingent expenses, mint at San Francisco, Cal	1884	22	547		70,000 00	6,200 00	76,200 00	61,582 42		14,617 58
Do	1883			511 53		12,909 05	13,420 58	950 18		12,470 40
Do	1882			5,833 81			5,833 81		5,833 81	
Salaries, assay office, Boisé City, Idaho	1884	22	548		3,000 00		3,000 00	3,000 00		
Do	1883			2 70			2 70			2 70
Wages and contingent expenses, assay office, Boisé City, Idaho	1884	22	548		5,000 00		5,000 00	4,997 74		2 26
Do	1883			44 72			44 72	31 55		13 17
Do	1882			550 04			550 04		550 04	
Salaries, assay office, Charlotte, N. C	1884	22	548		2,750 00		2,750 00	2,750 00		

Wages and contingent expenses, assay office, Charlotte, N. C	1884	22	548		2,000 00		2,000 00	2,000 00		
Do	1883					549 20	549 20			549 20
Do	1882			496 70			496 70		496 70	
Salaries assay office, New York, N. Y	1884	22	547		39,250 00		39,250 00	39,250 00		
Do	1883			277 30		148 30	425 60			425 60
Do	1882			76 41			76 41		76 41	
Wages of workmen, assay office, New York, N. Y	1884	22	548		25,000 00		25,000 00	23,100 00		1,900 00
Do	1883			1,768 25		397 50	2,165 75			2,165 75
Do	1882			169 75			169 75		169 75	
Contingent expenses, assay office, New York, N. Y	1884	22	548.		10,000 00		10,000 00	9,496 13		503 87
Do	1883					203 82	203 82			203 82
Do	1882			11 68			11 68		11 68	
Salaries, assay office, Saint Louis, Mo	1884	22	548		3,500 00		3,500 00	3,500 00		
Do	1883			2,000 00			2,000 00			2,000 00
Do	1882			2,500 20			2,500 20		2,500 20	
Wages and contingent expenses, assay office, Saint Louis, Mo	1884	22	548		4,800 00		4,800 00	1,886 10		2,913 90
Do	1883			4,090 28		37 69	4,127 97			4,127 97
Do	1882			4,015 27			4,015 27		4,015 27	
Fixtures and apparatus, assay office, Saint Louis, Mo				2,937 81		166 07	3,103 88			3,103 88
Parting and refining bullion				169,860 24		274,083 10	443,943 34	261,458 51		182,484 83
Storage of silver				89,336 40			89,336 40	84,338 20		4,998 20
Storage of silver dollars						172 65	172 65			172 65
Contingent expenses, assay office, Helena, Mont	1884	22	548		8,000 00		8,000 00	8,000 00		
Do	1883			641 28		1,862 97	2,504 25			2,504 25
Do	1882			2,852 32			2,852 32	9 69	2,842 63	
Salaries, assay office, Helena, Mont	1884	22	548		7,950 00		7,950 00	7,950 00		
Wages of workmen, assay office, Helena, Mont	1884	22	548		12,000 00		12,000 00	12,000 00		
Do	1883					98 31	98 31			98 31
Do	1882			2,255 21			2,255 21		2,255 21	
Freight on bullion and coin, mints and assay offices	1884	22	611		30,000 00		30,000 00	8,026 28		21,973 72
Do	1883			28,743 27			28,743 27	727 75		28,015 52
Do	1882			13,620 25			13,620 25		13,620 25	
Collecting mining statistics	1882			542 75			542 75		542 75	
Salaries, governor, &c., Territory of Arizona	1884	22	548		13,900 00		13,900 00	11,412 09		2,487 91
Do	1883			2,469 47			2,469 47	1,981 86		487 61
Do	1882			736 79			736 79	79 12	657 67	
Legislative expenses, Territory of Arizona	1884	22	548		2,250 00		2,250 00	2,200 00		50 00
Do	1883			4,080 00			4,080 00			4,080 00
Do	1882					79 12	79 12		79 12	
Contingent expenses, Territory of Arizona	1884	22	548		500 00		500 00	500 00		
Salaries governor, &c., Territory of Dakota	1884	22	548		16,400 00		16,400 00	12,268 14		4,131 86
Do	1883			2,130 21			2,130 21	2,089 00		41 21
Carried forward				5,904,787 19	15,169,159 72	1,801,583 74	22,875,530 65	16,621,420 21	177,191 02	6,076,919 42

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
TREASURY—continued.										
Brought forward				$5,904,787 19	$15,169,159 72	$1,801,583 74	$22,875,530 65	$16,621,420 21	$177,191 02	$6,076,919 42
Legislative expenses of Territory of Dakota.	1884	22	548		2,990 00		2,990 00	2,800 00		190 00
Do	1883			135 14		65 38	200 52			200 52
Contingent expenses of Territory of Dakota.	1884	22	548		500 00		500 00			500 00
Do	1883			250 00			250 00	250 00		
Salaries of governor, &c., of Territory of Idaho	1884	22	549		13,400 00		13,400 00	10,908 25		2,491 75
Do	1883			1,176 75			1,176 75	1,051 75		125 00
Do (tansfer account)	1881					90 00	90 00	90 00		
Legislative expenses of Territory of Idaho	1884	22	549		2,085 00		2,085 00	2,085 00		
Do	1883					1,226 25	1,226 25	606 77		619 48
Do	1881*					153 70	153 70		153 70	
Printing revised laws of Territory of Idaho.	1883			3,000 00			3,000 00			3,000 00
Contingent expenses of Territory of Idaho	1884	22	549		500 00		500 00	250 00		250 00
Do	1883			89 75			89 75			89 75
Do	1882			36 25			36 25	14 50	21 75	
Salaries of governor, &c., of Territory of Montana	1884	22	549		13,400 00		13,400 00	11,785 72		1,614 28
Do	1883			1,437 24			1,437 24	1,336 17		101 07
Legislative expenses of Territory of Montana	1884	22	549		2,000 00	429 62	2,429 62	2,000 00		429 62
Do	1883			3,030 00		1,913 29	4,943 29	3,500 00		1,443 29
Do	1882			387 00			387 00		387 00	
Do (transfer account)	1881					2,271 36	2,271 36	2,271 36		
Contingent expenses of Territory of Montana	1884	22	549		500 00		500 00	500 00		
Salaries of governor, &c., of Territory of New Mexico	1883	22	549		13,900 00		13,900 00	11,933 25		1,966 75
Do	1883			1,966 75			1,966 75	1,966 75		
Legislative expenses of Territory of New Mexico	1884	22 23	549 2		23,465 00		23,465 00	16,500 00		6,965 00
Do	1883			650 00			650 00	650 00		
Do	1882					309 24	309 24		309 24	
Contingent expenses of Territory of New Mexico	1884	22	549		500 00		500 00	500 00		
Salaries of governor, &c., of Territory of Utah	1884	22	549		13,400 00		13,400 00	12,658 25		741 75
Do	1883			1,391 75			1,391 75	1,391 75		
Legislative expenses of Territory of Utah	1884	22	549		22,490 00		22,490 00	18,000 00		4,490 00
Do	1883					154 89	154 89			154 89
Do	1882			6,073 99			6,073 99	2,000 00	4,073 99	
Contingent expenses of Territory of Utah	1884	22	5 49		500 00		500 00	500 00		

Salaries of governor, &c. of Territory of Washington	1884	22	550		13,400 00		13,400 00	12,208 25		1,191 75
Do	1883			1,191 75			1,191 75	1,191 75		
Legislative expenses of Territory of Washington	1884	22	549		22,730 00		22,730 00	22,500 00		230 00
Do	1882					2,158 86	2,158 86		2,158 86	
Contingent expenses of Territory of Washington	1884	22	550		500 00		500 00	500 00		
Salaries of governor, &c., of Territory of Wyoming	1884	22	549		13,400 00		13,400 00	11,965 93		1,434 07
Do	1883			494 50			494 50	494 50		
Legislative expenses of Territory of Wyoming	1884	22	550		24,590 00		24,590 00	24,590 00		
Do	1883					377 83	377 83			377 83
Do	1882			3,053 97			3,053 97		3,053 97	
Contingent expenses of Territory of Wyoming	1884	22	550		500 00		500 00	500 00		
Do	1881*					593 86	593 86		593 86	
Contingent expenses of Utah Commission	1884	22	549		15,000 00		15,000 00	15,000 00		
Do	1883			8,700 00		1,584 56	10,284 56	7,000 00		3,284 56
Compensation and expenses of officers of elections, Utah	1884	22	549		25,000 00		25,000 00	18,000 00		7,000 00
Do	1883			6,000 00		2,430 72	8,430 72			8,430 72
Compensation of Utah Commission	1884	22	549		25,000 00		25,000 00	25,000 00		
Do	1883			407 63			407 63			407 63
Improvement and repairs, District of Columbia	1884	22	464		530,000 00	1,055 18	531,055 18	530,000 00		1,055 18
Do	1883			65,000 00			65,000 00			65,000 00
Do	1882			15 44		634 10	649 54		649 54	
Do	1880 1881			533 19		704 00	1,237 19		704 00	533 19
Constructing, repairing, and maintaining bridges, District of Columbia	1884	22	464		3,500 00		3,500 00	3,500 00		
Do	1883					25 14	25 14			25 14
Do	1882			5 11			5 11			5 11
Washington Asylum, District of Columbia	1884	22	464		46,320 00		46,320 00	46,320 00		
Do	1883					2,094 55	2,094 55			2,094 55
Do	1882			54 14			54 14			54 14
Buildings and Grounds, Washington Asylum, District of Columbia	1883					7 49	7 49			7 49
Georgetown Almshouse, District of Columbia	1884	22	464		1,800 00		1,800 00	1,800 00		
Do	1883					13 10	13 10			13 10
Do	1882			1 00			1 00		1 00	
Hospital for the Insane, District of Columbia	1884	22	464		46,700 00		46,700 00	46,700 00		
Do	1882			97 50			97 50		97 50	
Columbia Hospital for Women and Lying-in Asylum, District of Columbia	1884				15,000 00		15,000 00	15,000 00		
Do	1882	22	465	7 99			7 99		7 90	
Carried forward				6,009,974 03	16,062,229 72	1,819,876 86	23,892,080 61	17,509,240 16	189,403 42	6,193,437 03

*And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884	Balances of appropriations June 30, 1884.
TREASURY—continued.										
Brought forward				$6,009,974 03	$16,062,229 72	$1,819,876 86	$23,892,080 61	$17,509,240 16	$189,403 42	$6,193,437 03
Transportation of paupers and prisoners, District of Columbia	1884	22	464		3,000 00		3,000 00	3,000 00		
Do	1883			2 00		244 83	246 83			246 83
Do	1882					55 12	55 12		55 12	
Do	1881			7 95			7 95			7 95
Reform School, District of Columbia	1884	22	465–5		32,950 00		32,950 00	29,950 00		3,000 00
Do	1882			333 67			333 67			333 67
Children's Hospital, District of Columbia	1884	22	465		5,000 00		5,000 00	5,000 00		
Saint Ann's Infant Asylum, District of Columbia	1884	22	465		5,000 00		5,000 00	5,000 00		
Industrial Home School, District of Columbia	1884	22	465		10,000 00		10,000 00	10,000 00		
Do	1882			46			46		46	
National Association for Colored Women and Children, District of Columbia	1884	22	465		7,000 00		7,000 00	7,000 00		
Building Association for Colored Women and Children, District of Columbia	1884	22	465		20,000 00		20,000 00	20,000 00		
Women's Christian Association, District of Columbia	1884	22	465		5,000 00		5,000 00	5,000 00		
Relief of the poor, District of Columbia	1884	22	465		15,000 00		15,000 00	15,000 00		
Do	1883					330 92	330 92			330 92
Do	1882			2,485 20			2,485 20	292 90	2,192 30	
Salaries and contingent expenses, offices, District of Columbia	1884	22	462		144,263 50	138 00	144,401 50	144,263 50		138 00
Do	1883			13 89			13 89			13 89
Do	1882			2,900 88		10 48	2,911 36			2,911 36
Do	1881					72 00	72 00		72 00	
Public schools, District of Columbia	1884	22 / 23	468 / 17		460,075 00	66 53	460,141 53	460,075 00		66 53
Do	1883					84 54	84 54			84 54
Do	1882			4,875 04			4,875 04	3,994 11		880 93
Do	1880			168 00			168 00			168 00
Buildings and grounds, public schools, District of Columbia	1883 / 1884			70,000 00			70,000 00	70,000 00		
Do				1,480 90		716 53	2,197 43	496 01		1,701 42
Metropolitan police, District of Columbia	1884	22	466		301,560 00		301,560 00	301,560 00		
Do	1883					144 16	144 16			144 16

Do	1882			314 54			314 54	21 36	293 18	
Fire department, District of Columbia	1884	22	467		101,060 00		101,060 00	101,060 00		
Do	1883			9 97			9 97			9 97
Do	1882			132 93			132 93			132 93
Do	1880			16 38			16 38			16 38
Courts, District of Columbia	1884	22	467		15,418 00	74 15	15,492 15	15,418 00		74 15
Do	1883					18 75	18 75			18 75
Do	1882			2,923 25		14 25	2,937 50	5 00	2,932 50	
Do	1881					1 25	1 25		1 25	
Markets, District of Columbia	1883			521 31		58 33	579 64	200 00		379 64
Do	1882			522 57			522 57		522 57	
Streets, District of Columbia	1884	22	466		231,880 00	1,304 85	233,184 85	231,880 00		1,304 85
Do	1883			33,000 00		5 00	33,005 00	33,000 00		5 00
Do	1882			176 00		324 03	500 03	20 00	480 03	
Do	1881					1,619 52	1,619 52		1,619 52	
Do	1880			319 61			319 61			319 61
Health department, District of Columbia	1884	22	469		42,780 00		42,780 00	42,780 00		
Do	1883					263 80	263 80	153 96		109 84
Do	1882			471 59			471 59	301 04		170 55
Interest and sinking fund, District of Columbia	1884	22	469		1,213,947 97	44,610 00	1,258,557 97	1,256,214 08		2,343 89
Miscellaneous expenses, District of Columbia	1884	22	469		10,600 00	2 10	10,602 10	10,600 00		2 10
Do	1883					30 00	30 00			30 00
Do	1882			1,913 14			1,913 14	75 69		1,837 45
Do	1881					63 72	63 72		63 72	
Miscellaneous and contingent expenses, District of Columbia	1831*					6 10	6 10		6 10	
Contingent expenses, District of Columbia	1884	22	469		10,000 00		10,000 00	2,000 00		8,000 00
Do	1883			6,743 38		206 57	6,949 95			6,949 95
Do	1882			2,241 55			2,241 55	823 85	1,417 70	
Water fund, District of Columbia	1884	22	470		105,850 50		105,850 50	105,850 50		
Do		20	102	142,078 73	138,452 55	6 37	280,537 65	900 00		279,637 65
Refunding taxes, District of Columbia		20	104		2,021 73		2,021 73	2,021 73		
Telegraph and telephone service, District of Columbia	1884	22	467		12,440 00		12,440 00	12,440 00		
Do	1883			2,581 10			2,581 10	1,885 69		695 41
Washington aqueduct, District of Columbia	1884	22	464		20,000 00		20,000 00	20,000 00		
Do	1882			1,354 17			1,354 17		1,354 17	
Employment of the poor in filling up grounds, District of Columbia				78 21		38 40	116 61			116 61
Bridge across Potomac, near Georgetown, District of Columbia				140,000 00			140,000 00			140,000 00
Increasing water supply of Washington, District of Columbia				1,465,279 30			1,465,279 30	312,911 24		1,152,368 06
Furniture and fixtures, buildings Columbia Hospital for Women, District of Columbia	1884	22	626		5,000 00		5,000 00	5,000 00		
Buildings Reform School, District of Columbia		22	626		7,500 00		7,500 00	7,500 00		
Carried forward				7,892,919 75	18,988,028 97	1,870,387 16	28,751,335 88	20,752,933 82	200,414 04	7,797,988 02

* And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year, 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
TREASURY—continued.										
Brought forward	.....	.....	.....	$7,892,919 75	$18,988,028 97	$1,870,387 16	$28,751,335 88	$20,752,933 82	$200,414 04	$7,797,988 02
Washington redemption fund, District of Columbia	.....	20	102	51 70	726 19	34 77	812 66	757 34	.....	55 32
Washington special-tax fund, District of Columbia	.....	20	102	2,829 44	7,599 96	207 89	10,637 29	8,382 63	.....	2,254 66
Redemption of tax-lien certificates, District of Columbia	.....	20	102	124 91	975 14	.....	1,100 05	542 68	.....	557 37
Redemption of assessment certificates, District of Columbia	.....	20	102	755 11	1,054 06	.....	1,809 17	1,618 88	.....	190 29
Building German Orphan Asylum Association, District of Columbia	1884	.....	.....	5,000 00	.....	.....	5,000 00	.....	.....	5,000 00
Payment of legal obligations, District of Columbia	1879 1880	.....	.....	60,509 52	.....	2,642 63	63,152 15	3,461 98	.....	59,690 17
Judgments, District of Columbia	1881 1882	.....	.....	365 39	.....	.....	365 39	.....	.....	365 39
Redemption of Pennsylvania avenue paving scrip, District of Columbia, act of July 8, 1870	.....	.....	.....	743 26	.....	.....	743 26	207 89	.....	535 37
Redemption of Pennsylvania avenue paving scrip, District of Columbia, act of July 19, 1876	.....	20	102	611 06	207 89	25	819 20	.....	.....	819 20
Reconstruction of Jefferson school building, District of Columbia	.....	.....	.....	1 84	.....	.....	1 84	.....	.....	1 84
New engine-house for Engine No. 5, District of Columbia	.....	21 22	467 38	2,105 00	442 50	.....	2,547 50	2,105 00	.....	442 50
General expenses, District of Columbia	.....	.....	.....	2,511 83	.....	.....	2,511 83	.....	.....	2,511 83
St. John's Church Orphanage, District of Columbia	.....	22	465	.....	1,500 00	.....	1,500 00	1,500 00	.....	.....
Redemption of certain funded indebtedness, District of Columbia	.....	.....	.....	.....	.....	281,500 00	281,500 00	.....	.....	281,500 00
Interest on 3.65 bonds, District of Columbia	.....	21	465	.....	6,899 17	.....	6,899 17	6,899 17	.....	.....
Surplus fund, District of Columbia	.....	20	102	.....	4 00	.....	4 00	.....	.....	4 00
Police station houses, Washington, D. C	.....	.....	.....	.....	.....	6 62	6 62	.....	.....	6 62
Water-mains for protection of Government Printing Office, District of Columbia	1884	22	470	.....	1,750 00	.....	1,750 00	1,750 00	.....	.....
Salaries Coast and Geodetic Survey	1884	22	609	.....	253,450 00	.....	253,450 00	253,450 00	.....	.....
Coast and Geodetic Survey, eastern division	1883	.....	.....	100 00	.....	819 79	919 79	640 97	.....	278 82
Do	1882	.....	.....	321 19	.....	.....	321 19	.....	321 19	.....
Do	1881 1882	.....	.....	190 94	.....	.....	190 94	.....	190 94	.....
Coast and Geodetic Survey, western division	1883	.....	.....	443 65	.....	.....	443 65	372 60	.....	71 05
Do	1882	.....	.....	38 31	.....	.....	38 31	2 25	36 06	.....

Do	1881 / 1882			15 49			15 49		15 49	
Party expenses, Coast and Geodetic Survey	1884	22	608-9		165,000 00		165,000 00	161,830 23		3,169 77
Transcontinental works, Coast and Geodetic Survey	1884	22	609		30,000 00		30,000 00	20,108 00		9,892 00
Points for State surveys, Coast and Geodetic Survey	1884	22	609		16,000 00		16,000 00	16,000 00		
Publishing observations Coast and Geodetic Survey	1884	22	610		6,000 00		6,000 00	3,000 00		3,000 00
Repairs of vessels, Coast Survey	1884	22	611		27,000 00		27,000 00	27,000 00		
General expenses, Coast Survey	1884	22	610		57,840 00	1,065 00	58,905 00	58,905 00		
Do	1883					25	25			25
Steamer for Pacific Coast, Coast Survey				100,000 00			100,000 00	100,000 00		
Observations eclipse of the sun						75 24	75 24	70 23		5 01
Salaries office Secretary of War	1884	22	550		111,850 00		111,850 00	111,750 00		100 00
Do	1883			3,703 30		31 16	3,734 46			3,734 46
Do	1882			1 64			1 64		1 64	
Contingent expenses office Secretary of War	1883			1,312 57			1,312 57	1,312 57		
Salaries office Adjutant-General	1884	22	550		691,900 00		691,900 00	687,900 00		4,000 00
Do	1883			31,106 16			31,106 16	177 23		30,928 93
Do	1882			15 84			15 84		15 84	
Salaries office Adjutant-General, old Navy Department Building	1883			81 69			81 69			81 69
Salaries office Inspector-General	1884	22	550		3,720 00		3,720 00	3,720 00		
Salaries office Quartermaster-General	1884	22	551		240,675 00		240,675 00	239,400 00		1,275 00
Do	1883					1,520 13	1,520 13			1,520 13
Do	1882			24 37			24 37		24 37	
Compensation and expenses of agents, Quartermaster's Department	1884	22	551		30,000 00		30,000 00	29,000 00		1,000 00
Do	1883			7,999 60			7,999 60	666 39		7,333 21
Salaries office Commissary-General	1884	22	551		43,730 00		43,730 00	43,730 00		
Do	1883					108 16	108 16			108 16
Do	1882			1 08			1 08		1 08	
Salaries office Surgeon-General	1884	22	551		532,280 00		532,280 00	529,800 00		2,480 00
Do	1883			15,847 67		851 60	16,699 27			16,699 27
Do	1882			92 10			92 10		92 10	
Do	1881*					23 34	23 34		23 34	
Salaries office Paymaster-General	1884	22	551		64,910 00		64,910 00	64,440 00		470 00
Do	1883					49 11	49 11			49 11
Do	1882			4 86			4 86		4 86	
Salaries office Military Justice	1884	22	550		13,260 00		13,260 00	13,089 00		171 00
Do	1883			68 63		16 96	85 59			85 59
Salaries office Chief of Engineers	1884	22	552		23,240 00		23,240 00	23,240 00		
Do	1883					41 74	41 74			41 74
Salaries office Chief of Ordnance	1884	22	551		44,860 00		44,860 00	44,842 00		18 00
Do	1883					98 49	98 49			98 49
Do	1882			55 38			55 38		55 38	
Salaries Signal Office	1884	22	550		50,660 00		50,660 00	49,595 00		1,065 00
Carried forward				8,129,953 28	21,415,562 88	2,159,480 29	31,704,996 45	23,264,200 86	201,196 33	8,239,599 26

* And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes.		Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
		Vol.	Page or section.							
TREASURY—continued.										
Brought forward	.....	.....	.....	$8,129,953 28	$21,415,562 88	$2,159,480 29	$31,704,996 45	$23,264,200 86	$201,196 33	$8,239,599 26
Salaries Signal Office	1883	.....	.....	.....	.....	578 41	578 41	.....	.....	578 41
Do	1882	.....	.....	16 31	.....	.....	16 31	.....	16 31	.....
Salaries, office Publication Records of the Rebellion	1884	22	552	.....	37,880 00	.....	37,880 00	34,420 00	.....	3,460 00
Do	1883	.....	.....	.....	.....	50 13	50 13	.....	.....	50 13
Salaries and contingent expenses, office Secretary of War (rebel archives branch)	1883	.....	.....	51 56	.....	.....	51 56	.....	.....	51 56
Salaries of civil employés in lieu of general service, or detailed enlisted men	.....	.....	.....	8,600 82	.....	34 43	8,635 25	.....	.....	8,635 25
Salary superintendent, &c., War Department building	1883	.....	.....	1,284 57	.....	13 32	1,297 89	.....	.....	1,297 89
Do	1882	.....	.....	6 00	.....	.....	6 00	.....	6 00	.....
Salary superintendent building corner Seventeenth and F streets	1884	22	552	.....	5,930 00	.....	5,930 00	5,930 00	.....	.....
Do	1883	.....	.....	.....	.....	15 14	15 14	.....	.....	15 14
Salary superintendent building on F street	1883	.....	.....	.....	.....	8 98	8 98	.....	.....	8 98
Support and medical treatment of transient paupers	1884	22	618	.....	15,000 00	.....	15,000 00	13,750 00	.....	1,250 00
Do	1883	.....	.....	1,250 00	.....	.....	1,250 00	1,250 00	.....	.....
Telegraph to connect the Capitol with the Departments and Government Printing Office	1884	22	615	.....	1,000 00	.....	1,000 00	1,000 00	.....	.....
Do	1883	.....	.....	.....	.....	1 63	1 63	.....	.....	1 63
Transportation of reports and maps to foreign countries	1884	22	618	.....	300 00	.....	300 00	.....	.....	300 00
Do	1883	.....	.....	.....	.....	82 31	82 31	.....	.....	82 31
Do	1882	.....	.....	258 61	.....	.....	258 61	.....	258 61	.....
Postage War Department	1884	22	563	.....	140,000 00	.....	140,000 00	85,501 26	.....	54,498 74
Do	1883	.....	.....	49,368 65	.....	.....	49,368 65	34,611 50	.....	14,757 15
Do	1882	.....	.....	64 02	.....	.....	64 02	.....	64 02	.....
Do	1881*	.....	.....	.....	.....	2 37	2 37	.....	2 37	.....
Postage to Postal Union countries, War Department	1884	22	552	.....	3,000 00	.....	3,000 00	2,000 00	.....	1,000 00
Do	1883	.....	.....	1,000 00	.....	100 00	1,100 00	.....	.....	1,100 00
Contingent expenses War Department	1884	22	552	.....	58,000 00	7 50	58,007 50	50,000 00	.....	8,007 50
Salaries employés public buildings and grounds	1884	22	552–3	.....	41,960 00	.....	41,960 00	41,960 00	.....	.....
Do	1883	.....	.....	.....	.....	55 36	55,36	.....	.....	55 36
Do	1882	.....	.....	10	.....	.....	10	.....	10	.....

Contingent expenses buildings under Chief Engineer	1884	22	553		500 00		500 00	500 00		
Rent of office buildings	1884	22	553		900 00		900 00	900 00		
Improvement and care of public grounds	1884	22	614		79,000 00		79,000 00	79,000 00		
Do	1883					232 16	232 16			232 16
Do	1882			855 38			855 38	21 25	834 13	
Repairs, fuel, &c., Executive mansion	1884	22	614		33,000 00		33,000 00	33,000 00		
Do	1883					66	66			66
Lighting, &c., Executive Mansion	1884	22	614		15,000 00		15,000 00	15,000 00		
Do	1883					28 47	28 47			28 47
Repairs to water-pipes and fire-plugs	1884	22	615		2,500 00		2,500 00	2,500 00		
Do	1883					1 67	1 67			1 67
Building for State, War, and Navy Departments				835,024 33			835,024 33	435,000 00		400,024 33
Building for State, War, and Navy Departments, south wing						450 66	450 66			450 66
Furniture and carpets for State, War, and Navy Departments	1884			10,000 00			10,000 00	10,000 00		
Fuel, lights, &c., for State, War, and Navy Departments	1884	22	553		34,000 00		34,000 00	34,000 00		
				230,000 00			230,000 00	176,000 00		54,000 00
Completion of the Washington Monument		22	552		30,000 00	1,271 26	31,271 26	30,000 00		1,271 26
Stationery, War Department	1884									
Rent of buildings, War Department	1884	22	552		40,100 00		40,100 00	39,020 00		1,080 00
Salaries office superintendent State, War, and Navy Department building	1884	22	553		82,300 00		82,300 00	81,600 00		700 00
Contingent expenses office of Adjutant-General	1882			1,677 77			1,677 77		1,677 77	
Rent of building, office of Adjutant-General	1883			4,000 00		1,000 00	5,000 00			5,000 00
Do	1881 1882			200 00			200 00		200 00	
Fire-proof roof building corner Seventeenth and F streets				278 12			278 12			278 12
Erection of fishways at Great Falls				45,000 00			45,000 00			45,000 00
Rent of building, office Surgeon-General	1883			380 43			380 43			380 43
Contingent expenses office Paymaster-General	1883					179 16	179 16			179 16
Contingent expenses office Publication of Records of the Rebellion	1883					56 48	56 48			56 48
Pedestal for statue of Rear-Admiral Samuel Francis Du Pont				6,000 00			6,000 00	2,800 00		3,200 00
Statue for Rear-Admiral Samuel Francis Du Pont		23	4		10,500 00		10,500 00			10,500 00
Contingent expenses War Department building	1883					82 96	82 96			82 96
Salaries office Secretary of the Navy	1884	22	553		54,210 00		54,210 00	54,146 22		63 78
Do	1883			3,185 93			3,185 93			3,185 93
Salaries Bureau Yards and Docks	1884	22	554		11,980 00		11,980 00	11,980 00		
Salaries Bureau of Equipment and Recruiting	1884	22	554		14,780 00		14,780 00	14,261 62		518 38
Carried forward				9,328,455 88	22,127,402 88	2,163,733 35	33,619,592 11	24,554,352 71	204,255 64	8,860,983 76

* And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations, July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations, June 30, 1884.
TREASURY—continued.										
Brought forward	.....	.....	.....	$9,328,455 88	$22,127,402 88	$2,163,733 35	$33,619,592 11	$24,554,352 71	$204,255 64	$8,860,983 76
Salaries, Bureau of Navigation	1884	22	554	.....	11,340 00	.....	11,340 00	11,340 00	.....	.....
Salaries, Bureau of Ordnance	1884	22	555	.....	7,980 00	.....	7,980 00	7,980 00	.....	.....
Do	1883	.....	.....	3 80	.....	.....	3 80	.....	.....	3 80
Salaries, Bureau of Construction and Repair	1884	22	555	.....	12,380 00	.....	12,380 00	12,159 12	.....	220 88
Salaries, Bureau of Steam Engineering	1884	22	555	.....	12,290 00	.....	12,290 00	12,290 00	.....	.....
Do	1883	.....	.....	22 19	.....	.....	22 19	.....	.....	22 19
Salaries, Bureau of Provisions and Clothing	1884	22	555	.....	17,580 00	.....	17,580 00	17,449 24	.....	130 76
Salaries, Bureau of Medicine and Surgery	1884	22	555	.....	9,460 00	.....	9,460 00	9,370 45	.....	89 55
Salaries, Nautical Almanac Office	1884	22	554	.....	23,000 00	.....	23,000 00	23,000 00	.....	.....
Salaries, office Judge-Advocate-General United States Navy	1884	22	555	.....	5,660 00	.....	5,660 00	5,649 13	.....	10 87
Do	1883	.....	.....	.....	.....	41	41	.....	.....	41
Salaries, Hydrographic Office	1884	22	554	.....	39,000 00	.....	39,000 00	38,716 05	.....	283 95
Do	1883	.....	.....	22 19	.....	.....	22 19	.....	.....	22 19
Salaries, Naval Observatory	1884	22	554	.....	17,420 00	.....	17,420 00	17,384 13	.....	35 87
Do	1883	.....	.....	150 45	.....	.....	150 45	.....	.....	150 45
Salaries, superintendent, &c., Navy Department building	1883	.....	.....	.....	.....	55	55	.....	.....	55
Contingent expenses, Navy Department	1884	22	555	.....	11,000 00	.....	11,000 00	11,000 00	.....	.....
Miscellaneous expenses, Hydrographic Office	1884	22	554	.....	20,000 00	2,751 01	22,751 01	12,000 00	.....	10,751 01
Contingent and miscellaneous expenses, Hydrographic Office	1883	.....	.....	5,027 51	.....	36 61	5,064 12	5,064 12	.....	.....
Contingent and miscellaneous expenses, Naval Observatory	1884	22	554	.....	9,436 00	.....	9,436 00	9,436 00	.....	.....
Library, Navy Department	1884	22	555	.....	2,500 00	.....	2,500 00	1,500 00	.....	1,000 00
Do	1883	.....	.....	500 00	.....	336 90	836 90	.....	.....	836 90
Postage, Navy Department	1884	22	563	.....	2,000 00	.....	2,000 00	.....	.....	2,000 00
Do	1883	.....	.....	2,000 00	.....	.....	2,000 00	45 00	.....	1,955 00
Do	1882	.....	.....	1,320 00	.....	.....	1,320 00	.....	.....	1,320 00
Contingent and miscellaneous expenses, Nautical Almanac Office	1883	.....	.....	.....	.....	82 84	82 84	40 69	.....	42 15
Salaries, Post-Office Department	1884	22	560	.....	681,980 00	43,792 10	725,772 10	707,616 34	.....	18,155 76
Do	1883	.....	.....	.....	.....	4,336 80	4,336 80	.....	.....	4,336 80
Do	1882	.....	.....	26 66	.....	874 84	901 50	.....	901 50	.....
Contingent expenses, Post-Office Department, stationery	1884	22	561	.....	9,000 00	.....	9,000 00	9,000 00	.....	.....
Contingent expenses, Post-Office Department, fuel	1884	22	561	.....	7,200 00	.....	7,200 00	7,200 00	.....	.....

Contingent expenses, Post-Office Department, gas	1884	22	561		5,600 00	1,000 00	6,600 00	5,600 00		1,000 00
Contingent expenses, Post-Office Department, plumbing and gas fixtures	1884	22	561		3,700 00	1,200 00	4,900 00	3,700 00		1,200 00
Contingent expenses, Post-Office Department, telegraphing	1884	22	561		5,900 00	2,000 53	7,900 53	5,900 00		2,000 53
Do	1883					85	85			85
Do	1882					1 91	1 91		1 91	
Contingent expenses, Post-Office Department printing	1884	22	561		4,700 00		4,700 00	4,700 00		
Contingent expenses, Post-Office Department, carpets	1884	22	561		5,900 00		5,900 00	5,900 00		
Contingent expenses, Post-Office Department, furniture	1884	22	561		6,200 00		6,200 00	6,200 00		
Contingent expenses, Post-Office Department, horses and wagons	1884	22	561		1,500 00	500 00	2,000 00	1,500 00		500 00
Contingent expenses, Post-Office Department, hardware	1884	22	561		1,700 00		1,700 00	1,700 00		
Contingent expenses, Post-Office Department, miscellaneous items	1884	22	561		12,000 00	3,000 00	15,000 00	12,000 00		3,000 00
Coutingent expenses, Post-Office Department, rent	1884	22	561		9,500 00		9,500 00	9,500 00		
Contingent expenses, Post-Office Department, publication of Official Postal Guide	1884	22	562		29,000 00		29,000 00	29,000 00		
Deficiency in the postal revenues	1884					135,941 26	135,941 26	135,941 26		
Do	1883			1,902,177 99		35,465 35	1,937,643 25	35,465 35		1,902,177 90
Do	1882			2,152,258 00			2,152,258 00		2,152,258 00	
Publication of post-route maps	1884	22	562		15,000 00		15,000 00	15,000 00		
Post-Office Department, building, refitting rooms				01		500 37	500 38			500 38
Salaries, Department of Agriculture	1884	22	408–10	180 00	127,640 00		127,640 00	127,500 00		140 00
Do	1883			8 11			180 00	175 49		4 51
Do	1882						8 11		8 11	
Collecting agricultural statistics	1884	22	408–10		80,000 00		80,000 00	79,500 00		500 00
Purchase and distribution of valuable seeds	1884	22	410		75,000 00		75,000 00	75,000 00		
Do	1882			8 47			8 47		8 47	
Experimental garden, Department of Agriculture	1884	22	408–10		7,500 00		7,500 00	7,200 00		300 00
Do	1882			31 75			31 75		31 75	
Museum, Department of Agriculture	1884	22	409		1,000 00		1,000 00	1,000 00		
Do	1883			500 00			500 00	500 00		
Laboratory, Department of Agriculture	1884	21 22	295,382 410		16,842 18		16,842 18	16,800 00		42 18
Do	1882			188 15			188 15		188 15	
Furniture, cases, and repairs, Department of Agriculture	1884	22	410		6,000 00		6,000 00	6,000 00		
Library, Department of Agriculture	1884	22	411		1,500 00		1,500 00	1,500 00		
Do	1882			26 15			26 15		26 15	
Investigating history of insects injurious to agriculture	1884	22	409		20,000 00		20,000 00	19,116 94		883 06
Carried forward				13,392,907 22	23,462,811 06	2,395,555 68	39,251,273 96	26,078,992 02	2,357,679 68	10,814,602 26

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations, July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations, June 30, 1884.
TREASURY—continued.										
Brought forward				$13,392,907 22	$23,462,811 06	$2,395,555 68	$39,251,273 96	$26,078,992 02	$2,357,679 68	$10,814,602 26
Investigating history of insects injurious to agriculture	1882			355 15			355 15	353 16		1 99
	1883									
Do	1882			1 06			1 06		1 06	
Investigating diseases of domesticated animals	1884	22	411		25,000 00		25,000 00	24,298 41		701 59
Investigating diseases of swine and other domesticated animals	1833			7,000 00			7,000 00	3,584 28		3,415 72
Do	1881			2,556 11			2,556 11		2,556 11	
	1882									
Reclamation of arid and waste lands	1884	22	411	7,296 58	10,000 00		17,296 58	15,963 25		1,333 33
Report on forestry	1884	22	411		10,000 00		10,000 00	10,000 00		
Do	1883			3,200 00			3,200 00	1,877 03		1,322 97
Do	1882			59 00			59 00		59 00	
Contingent expenses, Department of Agriculture	1884	22	411		14,000 00		14,000 00	13,500 00		500 00
Postage, Department of Agriculture		22	411		4,000 00		4,000 00	3,800 00		200 00
Do	1883			200 00			200 00	177 49		22 51
Improvement of grounds, Department of Agriculture	1884	22	409		8,000 00		8,000 00	8,000 00		
Experiments in the manufacture of sugar				5,454 60			5,454 60	5,454 60		
Building, Department of Agriculture		22	631		2,500 00		2,500 00	2,500 00		
Experiments in the culture of tea	1883			1,600 00			1,600 00	505 66		1,094 34
Do	1881			1,256 63			1,256 63		1,256 63	
	1882									
Data respecting the agricultural needs of the arid regions of the United States	1832			822 45			822 45		822 45	
Examination of wools and animal fibers				2,500 00			2,500 00	264 04		2,235 96
Transporting for permanent exhibition certain agricultural and mineral specimens exhibited at Atlanta, Ga				600 00			600 00	600 00		
Salaries, justices, &c., Supreme Court, United States	1884	22	563		93,500 00		93,500 00	93,500 00		
Do	1882			6,264 20			6,264 20		6,264 20	
Salaries and expenses office clerk Supreme Court United States	1883			8,000 00			8,000 00	8,000 00		
	1884									
Salaries of circuit judges	1884	22	563		54,000 00		54,000 00	52,368 12		1,631 88
Do	1882			345 60			345 60		345 60	
Salaries, retired United States judges	1884	22	254		42,711 20		42,711 20	42,711 20		

Salaries, district judges	1884	22	563		203,500 00	298 10	203,798 10	200,058 01		3,740 09
Do	1883			6,642 56			6,642 56	519 27		6,123 29
Do	1882			1,746 83			1,746 83			1,746 83
Salaries, justices, &c., supreme court, District of Columbia	1884	22	563		24,500 00		24,500 00	24,500 00		
Salaries, district attorneys	1884	22	563		20,100 00	7 70	20,107 70	20,023 78		83 92
Do	1883			501 22			501 22	269 14		232 08
Do	1882			192 98			192 98	40 00		152 98
Salaries, district marshals	1884	22	563		12,700 00		12,700 00	12,657 10		42 90
Do	1883			616 73			616 73	436 26		180 47
Do	1882			343 53			343 53			343 53
Do	1880*			22 78			22 78			22 78
Salaries and expenses reporter United States Supreme Court		22	254		8,700 00		8,700 00	8,700 00		
Salaries, Department of State	1884	22	538		112,350 00	10,097 50	122,447 50	121,498 99		948 51
Do	1883			755 40		49 45	804 85			804 85
Do	1882			17			17		17	
Contingent expenses, Department of State, proof-reading	1884	22	538		1,280 00	20 00	1,300 00	1,100 00		200 00
Do	1883			349 04		506 37	855 41			855 41
Do	1882			217 95			217 95		217 95	
Contingent expenses, Department of State, lithographing	1884	22	538		1,200 00	513 92	1,713 92	1,670 39		43 53
Do	1883					128 11	128 11			128 11
Do	1882			38 80			38 80		38 80	
Contingent expenses, Department of State, furniture, &c	1884	22	538		5,000 00	246 71	5,246 71	5,246 71		
Stationery, furniture, &c., Department of State	1883			500 00			500 00	206 58		293 42
Do	1882			588 84			588 84		588 84	
Postage, Department of State	1884	22	563		3,000 00		3,000 00	2,440 00		560 00
Do	1883			670 00			670 00	670 00		
Do	1882			460 00			460 00		460 00	
Editing, publishing, and distributing Revised and Annual Statutes	1884	22	538		4,000 00		4,000 00	4,000 00		
Do				800 00			800 00	308 77		491 23
Do	1882			80 33			80 33		80 33	
Removal and rearrangement of records, Department of State	1883 1884	}				80 96	80 96			80 96
Contingent expenses, Department of State, books and maps	1883 1884	} 22	538		3,000 00	276 81	3,276 81	3,276 81		
Do	1882			32 18		516 68	548 86	548 86		
Contingent expenses, Department of State	1884	22	538		4,800 00	20 77	4,820 77	4,820 77		
Do	1883					32 00	32 00			32 00
Do	1881*					200 00	200 00		200 00	
Observance of the centennial anniversary of the surrender of Lord Cornwallis at Yorktown, Va				328 92		669 67	998 59	998 59		
Carried forward				13,455,306 86	24,130,652 26	2,409,220 43	39,995,179 55	26,780,439 29	2,370,570 82	10,844,169 44

* And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes.		Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
		Vol.	Page or section.							
TREASURY—continued.										
Brought forward	.....	.....	.....	$13,455,306 86	$24,130,652 26	$2,409,220 43	$39,995,179 55	$26,780,439 29	$2,370,570 82	$10,844,169 44
Purchase of the Franklin collection of books and papers	.....	.....	.....	214 29	.....	86 89	301 18	.....	.....	301 18
Transmission of certain books and mementoes to the National Lincoln Monument Association, Springfield, Ill	.....	21	519	.....	24 15	.....	24 15	24 15	.....	.....
Salaries, Steamboat Inspection Service	.....	R. S.	3689	243,476 10	100,000 00	.....	343,476 10	199,000 00	.....	144,476 10
Contingent, Steamboat Inspection Service	.....	R. S.	3689	385,629 83	83,755 10	10 00	469,394 93	42,904 73	.....	426,490 20
Court-house, post-office, &c., Abingdon, Va	.....	.....	.....	24,993 07	.....	.....	24,993 07	150 50	.....	24,842 57
Court-house, post-office, &c., Atlanta, Ga	.....	.....	.....	1,274 36	.....	.....	1,274 36	1,140 79	.....	133 57
Court-house, post-office, &c., Austin, Tex	.....	.....	.....	118 44	.....	08	118 52	.....	.....	118 52
Post-office and subtreasury, Boston, Mass	.....	.....	.....	241,067 94	.....	.....	241,067 94	191,798 90	.....	49,269 04
Post-office, court-house, &c., Baltimore, Md	.....	.....	.....	397,505 18	.....	.....	397,505 18	149,448 75	.....	248,056 43
Post-office, &c., Brooklyn, N. Y	.....	.....	.....	499,981 07	.....	.....	499,981 07	408,565 40	.....	91,415 67
Post-office, court-house, &c., Charleston, W. Va	.....	.....	.....	14,261 66	.....	.....	14,261 66	13,001 75	.....	1,259 91
Post-office, court-house, &c., Columbus, Ohio	.....	.....	.....	40,540 66	.....	.....	40,540 66	29,152 46	.....	11,388 20
Post-office, &c., Council Bluffs, Iowa	.....	.....	.....	84,705 44	.....	.....	84,705 44	6,508 65	.....	78,196 79
Court-house and post-office, Covington, Ky	.....	.....	.....	9,333 41	.....	162 04	9,495 45	47 75	.....	9,447 70
Court-house, post-office, &c., Concord, N. H	.....	.....	.....	100,000 00	.....	.....	100,000 00	58,096 38	.....	41,903 62
Court-house and post-office, Des Moines, Iowa	.....	.....	.....	83,130 90	.....	.....	83,130 90	12,412 39	.....	70,718 51
Court-house, post-office, &c., Detroit, Mich	.....	.....	.....	161,056 08	.....	.....	161,056 08	12,794 13	.....	148,261 95
Court-house, Dover, Del	.....	.....	.....	170 00	.....	.....	170 00	35 84	.....	134 16
Court-house and post-office, Danville, Va	.....	.....	.....	.....	.....	24 42	24 42	.....	.....	24 42
Court-house, post-office, &c., Denver, Colo	.....	.....	.....	124,270 83	.....	.....	124,270 83	65,510 00	.....	58,760 83
Court-house, post-office, &c., Dallas, Tex	.....	.....	.....	74,907 55	.....	5,000 00	79,907 55	19,562 50	.....	60,345 05
Court-house, post-office, &c., Erie, Pa	.....	.....	.....	63,822 50	.....	.....	63,822 50	5,799 15	.....	58,023 35
Court-house, post-office &c., Fort Wayne, Ind	.....	.....	.....	49,932 83	.....	.....	49,932 83	25,261 95	.....	24,670 88
Court-house and post-office, Frankfort, Ky	.....	.....	.....	81,947 08	.....	.....	81,947 08	27,218 30	.....	54,728 78
Court house and post-office, Grand Rapids, Mich	.....	.....	.....	577 96	.....	.....	577 96	464 00	.....	113 96
Court-house, post-office, &c., Greensborough, N. C	.....	.....	.....	50,000 00	.....	.....	50,000 00	13,400 00	.....	36,600 00
Court-house, post-office, &c., Harrisonburg, Va	.....	.....	.....	24,992 00	.....	.....	24,992 00	12,003 00	.....	12,989 00
Post-office, &c., Hannibal, Mo	.....	.....	.....	37,500 00	.....	.....	37,500 00	13,615 50	.....	23,884 50
Court-house and post-office, Harrisburg, Pa	.....	.....	.....	7,933 73	.....	1,396 13	9,329 86	314 18	.....	9,015 68
Court-house and post-office, Indianapolis, Ind	.....	.....	.....	83 69	.....	.....	83 69	45 00	.....	38 69

Court-house and post-office, Jackson, Miss.				81,482 11			81,482 11	42,355 83		39,126 28
Court-house, post-office, &c., Jackson, Tenn.				49,993 33			49,993 33	6,842 00		43,151 33
Court-house, post-office, &c., Jefferson City, Mo				100,000 00			100,000 00	15,602 55		84,397 45
Post-office, &c., Jersey City, N. J				3,925 00			3,925 00	1,758 20		2,166 80
Court-house, post-office, &c., Lynchburg, Va.				49,961 05			49,961 05	13,761 75		36,199 30
Court-house, post-office, &c., Little Rock, Ark				870 82		236 78	1,107 60	496 39		611 21
Court-house, post-office, &c., Leavenworth, Kans				54,588 80			54,588 80	10,031 50		44,557 30
Court-house, post-office, &c., Lincoln, Nebr.				99 08		126 78	225 86	41 82		184 04
Court-house, post-office, &c., Louisville, Ky.				198,998 25			198,998 25	329 10		198,669 15
Post-office, &c., Minneapolis, Minn				119,771 94			119,771 94	64,455 78		55,316 16
Court-house and post-office, Montgomery, Ala				59,619 78		7,226 61	66,846 39	41,777 28		25,069 11
Court-house and post-office, Marquette, Mich.				50,000 00			50,000 00	7,459 00		42,541 00
Court-house and post-office, New York, N. Y.				15,579 49		804 93	16,384 42	155 00		16,229 42
Subtreasury building, New York, N. Y				2,573 98			2,573 98			2,573 98
Court-house, post-office, &c., Oxford, Miss.				50,000 00			50,000 00	6,126 90		43,873 10
Court-house, post-office, &c., Philadelphia, Pa		23	16	360,127 11	61,000 00		421,127 11	381,840 68		39,286 43
Court-house, post-office, &c., Pittsburgh, Pa.				347,340 24			347,340 24	84,159 32		263,180 92
Court-house, post-office, &c., Pensacola, Fla.				182,000 00			182,000 00	8,923 60		173,076 40
Court-house, post-office, &c., Peoria, Ill				62,825 00			62,825 00	26,999 95		35,825 05
Post-office, &c., Poughkeepsie, N. Y				74,864 33			74,864 33	37,295 20		37,569 13
Court-house and post-office, Parkersburg, W. Va				2,498 67			2,498 67	84 35		2,414 32
Court-house and post-office, Paducah, Ky				3,778 48		401 51	4,179 99	4,062 32		117 67
Court-house and post-office, Quincy, Ill				71,968 05			71,968 05	15,311 94		56,656 11
Court-house and post-office, Raleigh, N. C				79 16			79 16	33 75		45 41
Court-house and post-office, Rochester, N. Y.				153,403 66			153,403 66	17,102 47		136,301 19
Court-house and post-office, Syracuse, N. Y.				99,918 55			99,918 55	13,136 24		86,782 31
Subtreasury building, San Francisco, Cal				26 95			26 95	17 75		9 20
Post-office, &c., Scranton, Pa				2,447 38			2,447 38	422 05		2,025 33
Post-office, &c., Saint Joseph, Mo				38,250 00			38,250 00	915 50		37,334 50
Post-office, court-house, &c., Shreveport, La.				99,993 00			99,993 00	10,000 00		89,993 00
Post-office, court-house, &c., Topeka, Kans.				52,540 56			52,540 56	52,323 85		216 71
Post-office, court-house, &c., Trenton, N. J.				93 44			93 44	31 60		61 84
Post-office, Terre Haute, Ind				74,944 82			74,944 82	26,643 15		48,301 67
Post-office, court-house, &c., Utica, N. Y.				3 45			3 45	3 00		45
Post-office, court-house, &c., Williamsport, Pa				50,000 00			50,000 00	81 24		49,918 76
Treasury building, Washington, D. C				5,000 00			5,000 00	5,000 00		
Building for Bureau of Engraving and Printing, D. C				7,866 35		941 88	8,808 23	941 88		7,866 35
Fire-proof building for the National Museum.				13 27			13 27			13 27
Assay-office building at Helena, Mont				174 62			174 62			174 62
Total				18,786,354 18	24,375,431 51	2,425,638 48	45,587,424 17	28,985,238 38	2,370,570 82	14,231,614 97

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal yea ending June 30, 1884.	Payment during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
DIPLOMATIC.										
Salaries of ministers	1884	22	424		$315,500 00	$1,630 05	$317,130 05	$187,008 41		$130,121 64
Do	1883			$62,405 66		4,127 44	66,533 10	55,897 17		10,635 93
Do	1882			406 71			406 71		$406 71	
Salaries, secretaries of legation	1884	22	424–5, 603		37,100 00		37,100 00	23,092 74		14,007 26
Do	1883			8,933 47		587 39	9,520 86	4,441 95		5,078 91
Do	1882			7,694 69			7,694 69		7,694 69	
Extending diplomatic relations with Governments of Eastern Asia		22	431		5,000 00		5,000 00	3,750 00		1,250 00
Contingent expenses of foreign missions	1884	22	425		85,000 00	9,978 67	94,978 67	85,273 07		9,705 60
Do	1883			[20,107 21		2,358 41	22,465 62	17,200 82		5,264 80
Do	1882			10,853 39		12 37	10,865 76	1,275 00		9,590 76
Do	1881*					720 95	720 95		720 95	
Salaries, consular services	1884	22	425		416,100 00	5,958 48	422,058 48	287,037 03		135,021 45
Do	1883			113,572 74		5,486 11	119,058 85	118,568 54		490 31
Do	1882			723 89		186 06	909 95	596 45		313 50
Do	1881*					406 03	406 03		406 03	
Allowance for consular clerks	1884	22	429		66,500 00		66,500 00	36,386 91		30,113 09
Do	1883			27,057 11		357 91	27,415 02	23,646 91		3,768 11
Do	1882			2,165 42		91	2,166 33	379 99	1,786 34	
Salaries, interpreters to consulates in China, Japan, and Siam	1884	22	429		16,000 00		16,000 00	9,543 98		6,456 02
Do	1883			8,320 63		72 77	8,393 40	6,852 49		1,540 91
Do	1882			3,361 31			3,361 31		3,361 31	
Salaries, consular officers not citizens	1884	22	429		10,000 00		10,000 00	6,033 32		3,966 68
Do	1883			4,046 28			4,046 28	2,538 31		1,507 97
Do	1882			272 36			272 36	272 36		
Do	1881			442 00			442 00			442 00
Salaries, marshals for consular courts	1884	22	429		9,000 00		9,000 00	5,636 27		3,363 73
Do	1883			4,199 80		292 80	4,492 60	1,692 60		2,800 00
Do	1882			1,050 74			1,050 74		1,050 74	
Boat and crew for consul at Osaka and Hiogo	1884	22	429		500 00		500 00	79 12		420 88
Do	1883			500 00			500 00	247 37		252 63
Steam launch for legation and consulate at Constantinople	1884	22	429		1,000 00		1,000 00	1,000 00		
Do	1883			450 00			450 00			450 00
Expenses of interpreters, guards, &c., Turkish dominions	1884	22	429		3,000 00		3,000 00	2,509 14		490 86

Do	1883			136 42		681 23	817 65	337 25		480 40
Do	1882			317 05			317 05		317 05	
Loss on bills of exchange, consular service	1884	22	429		8,000 00		8,000 00	18 82		7,981 18
Do	1883			7,852 42			7,852 42	6,343 27		1,509 15
Do	1882			5,718 23			5,718 23		5,718 23	
Contingent expenses, United States consulates	1884	22	429		110,000 00	22,930 37	132,930 37	123,092 80		9,837 57
Do	1883			10,077 43		7,475 13	17,552 56	17,076 36		476 20
Do	1882			266 76			266 76	252 72		14 04
Do	1881*					2,428 27	2,428 27		2,428 27	
Do	1881			674 10			674 10			674 10
Rent of prisons, wages of keepers, &c., for American convicts in Siam and Turkey	1884	22	429		2,000 00		2,000 00	759 43		1,240 57
Do	1883			858 76		399 53	1,258 29	757 41		500 88
Do	1882			106 92			106 92		106 92	
Rent of prisons for American convicts in China	1884	22	429		1,500 00		1,500 00	656 60		843 40
Do	1883			383 34			383 34	372 22		11 12
Do	1882			11 12			11 12		11 12	
Rent of prisons for American convicts in Japan	1884	22	430		750 00		750 00	300 00		450 00
Do	1883			300 00			300 00	150 00		150 00
Do	1882			150 00			150 00		150 00	
Wages of keepers of prisons for American convicts in China	1884	22	430		9,500 00	1,357 59	10,857 59	6,314 66		4,542 93
Do	1883			3,608 58		891 66	4,500 24	2,405 81		2,094 43
Do	1882			2,567 81			2,567 81	489 60	2,078 21	
Wages of keepers for American convicts in Japan	1884	22	430		5,000 00		5,000 00	1,202 24		3,797 76
Do	1883			3,053 23			3,053 23	634 83		2,418 40
Do	1882			1,536 40			1,536 40		1,536 40	
Rent of court-house and jail in Japan	1884	22	430		3,850 00		3,850 00	3,400 00		450 00
Do	1883			450 00			450 00			450 00
Do	1882			450 00			450 00		450 00	
Building and grounds for legation in China	1884	22	430		3,100 00		3,100 00	1,500 00		1,600 00
Do	1883			850 00			850 00	569 93		280 07
Do	1882			425 79			425 79		425 79	
Bringing home criminals	1884	22	430		5,000 00	264 62	5,264 62	264 62		5,000 00
Do	1883			4,903 16		580 27	5,483 43	1,608 22		3,875 21
Do	1882			1,129 37			1,129 37	250 00	879 37	
Relief and protection of American seamen	1884	22	430		50,000 00	6,314 47	56,314 47	18,014 24		38,300 23
Do	1883			47,188 13		30,258 02	77,446 15	10,868 51		66,577 64
Do	1882			37,724 96		323 57	38,048 53	1,528 04	36,520 49	
Do	1881*					2,264 51	2,264 51		2,264 51	
Rescuing shipwrecked American seamen	1884	22	430		4,500 00		4,500 00	1,808 63		2,691 37
Do	1883			1,395 90		931 16	2,327 06	887 82		1,439 24
Do	1882			1,871 64			1,871 64		1,871 64	
Shipping and discharging seamen	1884	22	430		6,000 00		6,000 00	2,128 10		3,871 90
Carried forward				410,570 93	1,173,900 00	109,276 75	1,693,747 68	1,084,952 08	70,184 77	538,610 83

*And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
DIPLOMATIC—continued.										
Brought forward				$410,570 93	$1,173,900 00	$109,276 75	$1,693,747 68	$1,084,952 08	$70,184 77	$538,610 83
Shipping and discharging seamen	1883			3,396 00			3,396 00	1,581 00		1,815 00
Do	1882			1,434 00			1,434 00		1,434 00	
Expenses under the neutrality act	1884	22	430		10,000 00	326 56	10,326 56	10,326 56		
Do	1883			23,716 93		106 20	23,823 13	18,000 00		5,823 13
Do	1882			6,459 50			6,459 50		6,459 50	
Do	1881*					1,900 00	1,900 00		1,900 00	
Annual repairs of Cape Spartel light-house	1884	22	430		285 00		285 00	285 00		
Allowance to widows or heirs of diplomatic officers who die abroad	1884	22	430		5,000 00		5,000 00	3,008 56		1,991 44
Do	1883			3,939 99			3,939 99			3,939 99
Do	1882			2,165 93			2,165 93		2,165 93	
Transporting remains of ministers and consuls to their homes for interment		22	430		10,000 00		10,000 00	2,415 78		7,584 22
Publication of consular and other commercial reports	1884	22	430		20,000 00	6,637 39	26,637 39	26,637 39		
Do	1883					2 93	2 93			2 93
Do	1882			3,000 00		1,561 65	4,561 65		1,561 65	3,000 00
International Bureau of Weights and Measures	1883 1884			3,620 00			3,620 00	3,537 63		82 37
Do	1883			38 73			38 73			38 73
Do	1882			4 76			4 76			4 76
Expenses of International Sanitary Congress				3,778 05			3,778 05			3,778 05
International Prison Commission	1884	22	430		250 00		250 00			250 00
Do	1883			250 00			250 00			250 00
Do	1882			250 00			250 00	250 00		
International Exposition at Paris of 1878				2,539 33			2,539 33			2,539 33
International Remonetization of Silver				9,151 05		2,496 39	11,647 44			11,647 44
Joint Commission for settlement of claims between the United States and French Republic				49,158 68		13,845 62	63,004 30	60,000 00		3,004 30
International Fishery Exhibition of 1883 at London				10,000 00			10,000 00	10,000 00		
Berlin Fishery Exhibition				5 95			5 95			5 95
International Commission for the Establishment of Electrical Units				13,250 00			13,250 00	8,500 00		4,750 00
International Congress of Electricians held in 1881 at Paris				42 25			42 25			42 25
Tribunal of Arbitration at Geneva				831 59			831 59			831 59

Payment for certain lands ceded by the United States to Great Britain under treaty of Washington				5,677 02			5,677 02			5,677 02
International Bimetallic Commission				27,000 00		9,027 49	36,027 49			36,027 49
Commission to negotiate a commercial treaty with Mexico				8,000 00			8,000 00	2,208 33		5,791 67
International Exchange, Smithsonian Institution	1884	22	603		7,500 00		7,500 00	5,375 00		2,125 00
Salary, burial expenses, &c., Geo. P. Marsh, late minister to Italy				12,500 00			12,500 00	12,238 35		261 65
Reimbursing legal representatives of Francis P. Van Wyck				1,000 00			1,000 00			1,000 00
International Exhibition at Sydney and Melbourne	1879 1880	}				1,994 83	1,994 83			1,994 83
Relief of J. J. Coffey and Rebecca S. Lewis				350 00			350 00	350 00		
Salaries and expenses, Court of Commissioners Alabama Claims		22	99		181,400 00		181,400 00	181,400 00		
Salaries and expenses, United States and Spanish Claims Commission	1883			2,683 30			2,683 30	50 00		2,633 30
Do	1882			25 04			25 04	13 60	11 44	
Contingent expenses, United States and Spanish Claims Commission	1883			375 50		50 26	425 76			425 76
Estates of decedents' trust fund				47,692 45		2,706 69	50,399 14	2,743 59		47,655 55
Relief of claimants for destruction of private armed brig General Armstrong				22,123 88			22,123 88	727 36		21,396 52
Expenses Universal Exhibition at Paris						23,651 10	23,651 10			23,651 10
Total diplomatic				675,030 86	1,408,335 00	173,583 86	2,256,949 72	1,434,350 23	83,967 29	738,632 20
JUDICIARY.										
Salaries, Department of Justice	1884	22	562		138,450 00		138,450 00	136,448 02		2,001 98
Do	1882			5,229 74			5,229 74		5,229 74	
Contingent expenses, Department of Justice, furniture and repairs	1884	22	562		1,000 00		1,000 00	750 00		250 00
Do	1882			12 67			12 67		12 67	
Contingent expenses, Department of Justice, books for Department library	1884	22	562		1,500 00		1,500 00	1,500 00		
Contingent expenses, Department of Justice, books for office of Solicitor	1884	22	562		500 00		500 00	500 00		
Contingent expenses, Department of Justice, stationery	1884	22	562		1,500 00		1,500 00	1,500 00		
Do	1882			32			32		32	
Contingent expenses, Department of Justice, miscellaneous items	1884	22	562		7,160 00		7,160 00	7,160 00		
Do	1882			178 06			178 06		178 06	
Contingent expenses, Department of Justice, horses and wagons	1884	22	562		1,200 00		1,200 00	1,200 00		
Do	1882			163 36			163 36		163 36	
Carried forward				5,584 15	151,310 00		156,894 15	149,058 02	5,584 15	2,251 98

*And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
JUDICIARY—continued.										
Brought forward				$5,584 15	$151,310 00		$156,894 15	$149,058 02	$5,584 15	$2,251 98
Salaries employés, court-house, Washington	1884	22	562		9,840 00		9,840 00	9,810 00		30 00
Do	1883			222 67			222 67			222 67
Salary warden of the jail	1884	22	562		1,800 00		1,800 00	1,800 00		
Repairs of court-house, Washington, D. C	1884	22	604		1,000 00		1,000 00	950 00		50 00
Expenses of Territorial courts in Utah	1884	22	630		26,000 00		26,000 00	24,072 15		1,927 85
Do	1883			3,907 55			3,907 55	1,072 45		2,835 10
Do	1882			3,575 15			3,575 15	814 95	2,760 20	
Do	1881			1,077 32			1,077 32			1,077 32
Do	1880*			12 00			12 00	12 00		
Do	1880			1,517 61			1,517 61		1,517 61	
Defending suits in claims against the United States	1884	22	630		9,000 00		9,000 00	6,422 30		2,577 70
Do	1883			5,770 01			5,770 01			5,770 01
Do	1882			5,967 24			5,967 24		5,967 24	
Prosecution and collection of claims	1884	22	630		1,500 00		1,500 00			1,500 00
Do	1883			639 25			639 25	15 00		624 25
Punishing violations of intercourse acts and frauds	1884	22	630		5,000 00		5,000 00	4,085 65		914 35
Do	1883			2,640 85		$187 45	2,828 30	721 68		2,106 62
Do	1882			1,804 81			1,804 81		1,804 81	
Prosecution of crimes	1884	25	630		25,000 00		25,000 00	21,665 90		3,334 10
Do	1883			1,904 73			1,904 73	1,904 73		
Do	1882			1,981 33			1,981 33		1,981 33	
Support of convicts	1884	22	631		10,000 00		10,000 00	1,439 25		8,560 75
Do	1883			10,201 24			10,201 24	713 14		9,488 10
Do	1882			21,198 76			21,198 76	146 00	21,052 76	
Preservation of records United States courts	1882			144 00			144 00		144 00	
Rent of building Department of Justice	1882			989 00			989 00		989 00	
Publishing supreme court reports, Territory of Wyoming	1882			1,000 00			1,000 00	819 17	180 83	
Law library of Wyoming	1882			24 00			24 00			24 00
Payment to Henry Fink, United States marshal				108 80			108 80	108 80		
Fees of supervisors of elections		R. S.	3689		18,109 42	400 00	18,509 42	18,509 42		
Fees of supervisors of elections prior to July 1, 1889				50 00			50 00			50 00

Expenses of United States courts, 1879 and prior				41,561 87		6,366 36	47,928 23	7,402 20		40,526 03
Fees of jurors United States courts	1884	22	631		450,000 00	6,702 25	456,702 25	456,690 00		12 25
Do	1883			2,867 55		47,643 33	50,510 88	17,832 15		32,678 73
Do	1882			67,085 27		528 57	67,613 84	604 00		67,009 84
Do	1880			742 35			742 35	300 00		442 35
Fees of witnesses United States courts	1884	22	631		600,000 00	9,874 33	609,874 33	609,599 65		274 68
Do	1873			4,145 02		47,355 19	51,500 21	39,766 83		11,733 38
Do	1882			58,937 45		4,229 04	63,166 49	1,427 01		61,739 48
Do	1881*					194 25	194 25		194 25	
Do	1880			371 10			371 10			371 10
Support of prisoners United States courts	1884	22	631		300,000 00	6,541 03	306,541 03	232,255 69		74,285 34
Do	1883			89,229 56		21,134 93	110,364 49	33,072 21		77,292 28
Do	1882			62,244 24		3,424 31	65,668 55	4,454 88	61,213 67	
Do	1881*					1,697 00	1,697 00		1,697 00	
Do	1880			1,093 00			1,093 00			1,093 00
Miscellaneous expenses United States courts	1884	22	631		310,000 00	2,312 79	312,312 79	294,605 48		17,707 31
Do	1883			7,710 01		13,074 27	20,784 28	18,884 64		1,899 64
Do	1882			10,254 24		1,571 97	11,826 21	2,731 49	9,094 72	
Do	1881*					77 25	77 25		77 25	
Do	1880			615 99			615 99	157 91		458 08
Fees and expenses of marshals United States courts	1884	22	631		600,000 00	2,062 22	602,062 22	601,435 67		626 55
Do	1883			60,472 85		22,308 77	82,781 62	43,827 24		38,954 38
Do	1882			31,147 45		6,867 71	38,015 16	12,947 70		25,067 46
Do	1881			13,280 86			13,280 86	1,512 52		11,768 34
Do	1881*					645 82	645 82		645 82	
Do	1880			14,274 00			14,274 00	383 97		13,890 03
Fees of attorneys United States courts	1884	22	631		325,000 00		325,000 00	311,242 49		13,757 51
Do	1883			159 59			159 59	147 38		12 21
Do	1880			5,395 27			5,395 27			5,395 27
Fees of clerks United States courts	1884	22	631		160,000 00		160,000 00	127,207 12		32,792 88
Do	1883			14,860 84		21 30	14,882 14	14,876 85		5 29
Do	1882			20,535 00			20,535 00	372 40		20,162 60
Do	1881			7,814 50			7,814 50			7,814 50
Do	1880			7,788 73			7,788 73			7,788 73
Rent of court rooms United States courts	1884	22	631		50,000 00		50,000 00	37,149 20		12,850 80
Do	1883			32,221 32			32,221 32	16,472 43		15,748 89
Do	1882			20,803 40			20,803 40	1,404 00	19,399 40	
Do	1880			360 00			360 00	60 00		300 00
Fees of commissioners United States courts	1884	22	631		130,000 00		130,000 00	92,049 06		37,950 94
Do	1883			27,951 28			27,951 28	27,950 93		35
Do	1882			34,961 57			34,961 57	864 95		34,096 62
Do	1880			9 75			9 75			9 75
Payment of special deputy marshals at Congressional elections	1881*			2,145 50		4,658 00	6,803 50	90 00		6,713 50
Judgment and costs in suit of L. P. Milligen				802 16			802 16			802 16
Total Judiciary				712,162 19	3,183,559 42	209,878 14	4 105,599 75	3,253,918 66	134,304 04	717,377 05

*And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
CUSTOMS.										
Collecting revenue from customs	------	R. S.	3687	$589,737 36	$6,574,665 46	$47,250 07	$7,211,652 89	$6,756,735 83	$293,752 93	$161,164 13
Collecting revenue from customs prior to July 1, 1879	------	------	----------	125 50	----------	----------	125 50	----------	125 50	----------
Expenses Revenue Cutter Service	1882	------	----------	3,471 01	----------	25,004 92	28,475 93	163 31	28,312 62	----------
Do	1881*	------	----------	----------	----------	320 09	320 09	----------	320 09	----------
Do	1883	------	----------	3,353 09	----------	80,810 27	84,163 36	83,611 62	----------	551 74
Do	1884	22	606	----------	875,000 00	6,974 04	881,974 04	880,646 25	----------	1,327 79
Supplies of light-houses	1881*	------	----------	----------	----------	31 61	31 61	----------	31 61	----------
Do	1882	------	----------	16,953 96	----------	----------	16,953 96	55 68	16,898 28	----------
Do	1883	------	----------	18,320 51	----------	22,430 35	40,750 86	5,000 53	----------	35,750 33
Do	1884	22	607	----------	375,000 00	28,266 85	403,266 85	394,258 44	----------	9,008 41
Repairs and incidental expenses of light-houses	1881*	------	----------	----------	----------	11 66	11 66	----------	11 66	----------
Do	1882	------	----------	23,581 93	----------	688 17	24,270 10	----------	24,270 10	----------
Do	1883	------	----------	25,715 14	----------	6,041 20	31,756 34	19,862 93	----------	11,893 41
Do	1884	22	607	----------	310,000 00	30,405 32	340,405 32	330,164 36	----------	10,240 96
Salaries of keepers of light-houses	1882	------	----------	44,068 54	----------	----------	44,068 54	10 50	44,058 04	----------
Do	1883	------	----------	8,559 58	----------	9,253 93	17,813 51	10 81	----------	17,802 70
Do	1884	22	606	----------	585,000 00	10,797 68	595,797 68	575,816 86	----------	19,980 82
Inspecting lights	1882	------	----------	1,198 97	----------	----------	1,198 97	----------	1,198 97	----------
Do	1883	------	----------	858 64	----------	475 75	1,334 39	----------	----------	1,334 39
Do	1884	22	607	----------	4,000 00	----------	4,000 00	3,000 00	----------	1,000 00
Expenses of light-vessels	1882	------	----------	12,707 66	----------	----------	12,707 66	----------	12,707 66	----------
Do	1883	------	----------	11,633 53	----------	10,307 98	21,941 51	18,109 48	----------	3,832 03
Do	1884	22	607	----------	†214,360 00	3,792 06	218,152 06	202,621 38	----------	15,530 68
Expenses of fog-signals	1882	------	----------	15,911 80	----------	92 49	16,004 29	----------	16,004 29	----------
Do	1883	------	----------	3,731 44	----------	3,846 82	7,578 26	1,785 70	----------	5,792 56
Do	1884	22	607	----------	60,000 00	3,709 22	63,709 22	54,697 02	----------	9,012 20
Expenses of buoyage	1882	------	----------	16,487 65	----------	----------	16,487 65	53 68	16,433 97	----------
Do	1883	------	----------	12,050 25	----------	9,081 80	21,132 05	9,003 21	----------	12,128 84
Do	1884	22	607	----------	325,000 00	16,423 15	341,423 15	324,849 21	----------	16,573 94
Repairs and preservation of public buildings	1882	------	----------	5,864 97	----------	----------	5,864 97	596 05	5,268 92	----------
Do	1883	------	----------	3,999 86	----------	----------	3,999 86	3,999 86	----------	----------
Do	1884	22	604	----------	150,000 00	6 54	150,006 54	145,083 94	----------	4,922 60
Furniture, and repairs of same, for public buildings	1882	------	----------	2,409 80	----------	----------	2,409 80	104 60	2,305 20	----------
Do	1883	------	----------	19,989 77	----------	----------	19,989 77	18,536 74	----------	1,453 03

Do	1884	22 / 23	612		370,000 00	336 00	370,336 00	310,161 92		60,174 08
Fuel, lights, and water for public buildings	1882		15	21,696 86			21,696 86	578 67	21,118 19	
Do	1883			21,794 72			21,794 72	21,597 85		196 87
Do	1884	22 / 23	612 / 15		528,000 00	49 59	528,049 59	443,574 14		84,475 45
Heating apparatus for public buildings	1882			6,898 55			6,898 55	2,745 77	4,152 78	
Do	1882			1,930 79		172 13	2,102 92	2,102 92		
Do	1883 / 1884			15,000 00			15,000 00	15,000 00		
Do	1884	22	612		110,000 00		110,000 00	90,000 00		20,000 00
Pay of assistant custodians and janitors	1881*					843 52	843 52		843 52	
Do	1883			7,898 19			7,898 19			7,898 19
Do	1884	22 / 23	612 / 15		356,000 00		356,000 00	340,000 00		16,000 00
Marine Hospital Service		R. S.	3689, 4803	†80,993 44	421,348 59	10,688 44	513,030 47	476,075 89		36,954 58
Life-Saving Service	1882			23,216 26		541 92	23,758 18	5,960 72	17,797 46	
Do	1883			70,014 63		2,523 26	72,537 89	23,435 59		49,102 30
Do	1884	22	605		798,500 00	1,635 70	800,135 70	743,822 19		56,313 51
Life-Saving Service, contingent expenses	1881*					1 50	1 50		1 50	
Establishing life-saving stations				86,009 60		800 00	86,809 60	45,004 54		41,805 06
Rebuilding and improving life-saving stations				694 92		752 47	1,447 39			1,447 39
Rebuilding revenue steamer William Pitt Fessenden				40,210 96			40,210 96	37,969 20		2,241 76
Rebuilding revenue steamer Commodore Perry				73,970 00			73,970 00	44,527 11		29,442 89
Constructing a revenue steamer				632 20			632 20			632 20
Constructing two steam launches				7,690 00			7,690 00	7,628 61		61 39
Building or purchase of such vessels as may be required for the revenue service				8,164 78		11,226 21	19,390 99	6 40		19,384 59
Compensation in lieu of moieties	1882			82 14			82 14		82 14	
Do	1883			4,610 17		30 76	4,640 93	442 85		4,198 08
Do	1884	22	612		30,000 00	1 00	30,001 00	29,798 45		202 55
Salaries and traveling expenses of agents at seal fisheries in Alaska	1882			1,114 06		361 05	1,475 11		1,475 11	
Do	1883			8,270 63			8,270 63	6,794 48		1,476 15
Do	1884	22	612		13,350 00		13,350 00	7,378 21		5,971 79
Standard weights and measures	1882			600 00			600 00		600 00	
Do	1883			10 00			10 00		10 00	
Distribution of standard weights and measures for use of colleges						65	65		65	
Carried forward				1,322,233 86	12,100,224 05	345,986 17	13,768,444 08	12,483,383 50	507,781 19	777,279 39

* And prior years.

† $25,640 and $28,840 transferred to Treasury Ledger.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
CUSTOMS—continued.										
Brought forward	.....	.. ..	.....	$1,322,233 86	$12,100,224 05	$345,986 17	$13,768,444 08	$12,483,383 50	$507,781 19	$777,279 39
Protection of sea-otter hunting-grounds and seal fisheries in Alaska	1882	.....	.....	25,000 00	....	....	25,000 00	25,000 00	.....	....
Do	1883	.....	.....	25,000 00	....	....	25,000 00	.....	.....	25,000 00
Do	1884	22	612	.....	25,000,00	....	25,000 00	....	.....	25,000 00
Custom-house, Boston, Mass	.....	.....	.....	190 33	.....	.....	190 33	.....	.....	190 33
Custom-house and post-office, Fall River, Mass	.....	.....	.....	40,007 81	.....	.....	40,007 81	30,905 06	.....	9,102 75
Custom-house, Hartford, Conn	.....	.....	.....	9,160 32	.....	55 02	9,215 34	9,017 55	.....	197 79
Custom-house and post-office, Albany, N. Y	.....	23	15	34,739 71	55,000 00	.....	89,739 71	49,739 71	.....	40,000 00
Custom-house and post-office, Buffalo, N. Y	.....	.....	.....	129,458 10	.....	....	129,458 10	35,494 21	.....	93,963 89
Barge-office building, New York	.....	.....	.....	97 60	.....	377 82	475 42	475	.....	470 67
Marine hospital at Pittsburgh, Pa	.....	.....	.....	7,015 24	.....	.....	7,015 24	.....	.....	7,015 24
Marine hospital at Baltimore, Md	.....	.....	.....	100,000 00	....	.....	100,000 00	.....	.....	100,000 00
Marine hospital at Wilmington, N. C	.....	.....	.....	250 00	.....	.....	250 00	.....	.....	250 00
Marine hospital at Key West, Fla	.....	.....	.....	3 26	.....	.....	3 26	.....	.....	3 26
Marine hospital, New Orleans, La	.....	.....	.....	82,495 90	.....	.....	82,495 90	57,282 31	.....	25,213 59
Custom-house, New Orleans, La	.....	.....	.....	31,404 16	.....	.....	31,404 16	23,460 99	.....	7,943 17
Custom-house, Galveston, Tex	.....	.....	.....	62,500 00	.....	.....	62,500 00	20,620 60	.....	41,879 40
Custom-house and post-office, Cincinnati, Ohio	.....	23	15	479,616 71	100,000 00	.....	579,616 71	370,675 00	.....	208,941 71
Custom-house and post-office, Cleveland, Ohio	.....	.....	.....	61,692 60	.....	.....	61,692 60	56,728 34	.....	4,964 26
Custom-house, court-house, &c., Toledo, Ohio	.....	.....	.....	165,259 29	.....	.....	165,259 29	67,546 94	.....	97,712 35
Marine hospital, Cincinnati, Ohio	.....	.....	.....	48,500 00	.....	.....	48,500 00	21,337 65	.....	27,162 35
Custom-house, court-house, and post-office, Evansville, Ind	.....	.....	.....	4,236 33	.....	.....	4,236 33	92 60	.....	4,143 73
Custom-house, subtreasury, &c., Chicago, Ill	.....	.....	.....	76 43	.....	117 41	193 84	168 03	.....	25 81
Marine hospital, Chicago, Ill	.....	.....	.....	98 97	.....	.....	98 89	.....	.....	98 97
Bridewell dock property, Chicago, Ill	.....	.....	.....	1,583 00	.....	.....	1,583 00	825 29	.....	757 71
Marine hospital, Memphis, Tenn	.....	23	15	29,084 30	30,000 00	26 00	59,110 30	32,079 64	.....	27,030 66
Marine hospital, Cairo, Ill	.....	.....	.....	60,000 00	.....	.....	60,000 00	20,767 90	.....	39,232 10
Custom-house and post-office, Memphis, Tenn	.....	.....	.....	95,105 00	.....	.....	95,105 00	60,085 92	.....	35,019 08
Custom-house, post-office, and court-house, Nashville, Tenn	.....	.....	.....	815 56	.....	112 29	927 85	300 00	.....	627 85
Custom-house, Saint Louis Mo	23	.....	15	72,327 49	25,700 00	.....	98,027 49	71,943 79	.....	26,083 70
Custom-house, Kansas City, Mo	.....	.....	.....	102,192 52	.....	.....	102,192 52	83,917 70	.....	18,274 82
Appraisers' stores, San Francisco, Cal	.....	.....	.....	497 99	.....	.....	497 99	356 17	.....	141 82
Marine hospital, San Francisco, Cal	.....	.....	.....	184 25	.....	.....	184 25	.....	.....	184 25
Ram Island light-station, Maine	.....	.....	.....	11,317 13	.....	3,219 47	14,536 60	5,000 00	.....	9,536 60

Beacon lights, Lake Memphremagog, Vermont				54 81			54 81		54 81	
Day beacons, Maine, New Hampshire, and Massachusetts				4,216 93			4,216 93			4,216 93
Stage Harbor light-station, Massachusetts				117 26			117 26		117 26	
Ipswich light-station, Massachusetts				61 74			61 74		61 74	
Borden's Flats light-station, Massachusetts				273 23			273 23		273 23	
Fuller's Rock and Sassafras Point light-station Rhode Island				4,500 00			4,500 00		4,500 00	
Castle Hill fog-signal, Rhode Island				10,000 00			10,000 00		10,000 00	
Wickford Harbor light-station, Rhode Island				10,000 00			10,000 00		10,000 00	
Conimicut light-station, Rhode Island				336 41			336 41		336 41	
Saybrook beacon light, Connecticut				20,000 00			20,000 00			20,000 00
Danskammer Point fog-bell, New York				5,000 00			5,000 00	5,000 00		
Hell Gate electric lights, New York				10,000 00			10,000 00	10,000 00		
Cumberland Head light-station, New York				250 00			250 00		250 00	
Cold Spring Harbor light-station, New York				10,000 00			10,000 00			10,000 00
Thirty-Mile Point light-station, New York				10,000 00			10,000 00		10,000 00	
Prince's Bay light-station, New York				3,500 00			3,500 00		3,500 00	
Staten Island Depot, New York						4 43	4 43			4 43
Barnegat light-station, New Jersey				9,000 00		103 09	9,103 09			9,103 09
Absecom light-station, New Jersey				20,000 00		1,728 55	21,728 55			21,728 55
Horseshoe Shoal range-lights, New Jersey				2,000 00		77 63	2,077 63		2,077 63	
Great Beds light-station, New Jersey				1,039 92			1,039 92		1,039 92	
Cohansey light-station, New Jersey						363 79	363 79		363 79	
Lewes light-station, Delaware				2,058 92			2,058 92		2,058 92	
Ship John Shoal light-station, Delaware				2,952 13			2,952 13		2,952 13	
Reedy Island light-station, Delaware				200 09			200 09		200 09	
Fourteen-Foot Bank light-station, Delaware Bay				172,500 00		1,068 67	173,568 67	52,500 00		121,068 67
Five-Fathom Bank light-ship, Delaware Bay				43			43		43	
Lazaretto depot, Maryland				3,000 00		557 26	3,557 26	3,000 00		557 26
Janes Island light-station, Maryland				272 92			272 92		272 92	
Hooper's Strait light-station, Maryland				173 00			173 00		173 00	
Great Shoals light-station, Maryland				15,000 00		4,517 72	19,517 72	15,000 00		4,517 72
Sandy Point Shoal light-station, Maryland				15,000 00		190 60	15,190 60	15,000 00		190 60
Patuxent River range-lights, Maryland				10,000 00		355 28	10,355 28	10,000 00		355 28
Kent Point light-station, Maryland						42 22	42 22			42 22
Portsmouth depot, Virginia				3,500 00		1,000 00	4,500 00			4,500 00
Bell's Rock light-station, Virginia				3,313 36		5 35	3,318 71		3,318 71	
Laurel Point light-station, North Carolina				225 95			225 95		225 95	
Hilton Head and Bay Point light-station, South Carolina				307 55			307 55	45 60	261 95	
Sampit River light-station, South Carolina				3 70			3 70		3 70	
Paris Island light-station, South Carolina						118 34	118 34			118 34
Lights on the Savannah River, Georgia				16,838 00		7,886 54	24,724 54	21,838 00		2,886 54
Fog Island light-station, Georgia				34 27			34 27		34 27	
American Shoal light-station, Florida				31,334 52			31,334 52		31,334 52	
Dry Tortugas light-station, Florida				75,000 00			75,000 00			75,000 00
Repairs of iron light-houses, Florida				3,100 00		398 04	3,498 04			3,498 04
Carried forward				3,477,309 00	12,335,924 05	368,311 69	16,181,544 74	13,659,117 25	591,192 57	1,931,234 92

Statement showing the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
CUSTOMS—continued.										
Brought forward				$3,477,309 00	$12,335,924 05	$368,311 69	$16,181,544 74	$13,659,117 25	$591,192 57	$1,931,234 92
Florida Reef beacons, Flordia				10,000 00		239 42	10,239 42			10,239 42
Sanibel Island light-station, Florida				49,000 00		9,062 28	58,062 28	44,000 00		14,062 28
Mosquito Inlet light-station, Florida				55,000 00		4,369 53	59,369 53	30,000 00		29,369 53
Cape San Blas light-station, Florida				35,000 00		10,010 12	45,010 12	35,000 00		10,010 12
Dog River Bar and Choctaw Pass Channel, Alabama				25,000 00			25,000 00	500 00		24,500 00
Re-establishment of light-houses, Texas				20,000 00			20,000 00			20,000 00
South Pass pier lights, Mississippi River, Louisiana				9,189 25			9,189 25			9,189 25
Trinity Shoal light-ship, Louisiana				3,020 56			3,020 56		3,020 56	
South Pass light-station, Louisiana				17,081 92			17,081 92		17,081 92	
Calcasieu range-light-station, Louisana				1,500 00			1,500 00			1,500 00
Red River lights, Louisiana				1,305 09			1,305 09			1,305 09
Amite River light-station, Louisiana				1,214 52			1,214 52			1,214 52
Maumee range-beacons, Ohio				19,000 00			19,000 00	19,000 00		
Sandusky Bay light-station, Ohio				94 52			94 52	12 15	82 37	
Maumee Bay light-stations, Ohio				4,825 78			4,825 78		4,825 78	
Wangoshance light-station, Michigan				25,000 00			25,000 00	25,000 00		
Little Traverse light-station, Michigan				15,000 00			15,000 00	10,000 00		5,000 00
Portage River light-station, Michigan				1,000 00			1,000 00	1,000 00		
Pier-head beacon lights on the lakes, Michigan				1,444 74			1,444 74	1,444 74		
Graham Shoals bell-buoy, Michigan				384 32			384 32		384 32	
Stannard's Rock light-station, Michigan				13,000 00			13,000 00	13,000 00		
Detroit River light-station, Michigan				57,500 00			57,500 00	20,000 00		37,500 00
Point No Point light-station, Washington Territory				6,421 66			6,421 66		6,421 66	
Point Robinson fog-signal, Washington Territory				6,500 00			6,500 00	6,500 00		
West Point fog-signal, Washington Territory				6 05			6 05		6 05	
Lights, beacons, and buoys, Willamette and Columbia Rivers, Oregon						500 00	500 00	500 00		
Tillamook Head light-station, Oregon				1,729 32			1,729 32			1,729 32
Racine Point light-station, Wisconsin				5,018 64			5,018 64		5,018 64	
Re-establishment of lights, Mississippi River				4,839 57			4,839 57		4,839 57	
Lime Point fog-signal, California				10,000 00		19	10,000 19	10,000 00	19	

Northwest Seal Rock light station, California				70,000 00			70,000 00	70,000 00		
Oakland Harbor light-station, California				5,000 00			5,000 00			5,000 00
Point Firmin light station, California				300 00			300 00			300 00
Piedras Blancas light-station, California				499 94			499 94		499 94	
Point Pinos light-station, California				1,367 85			1,367 85			1,367 85
Farallon fog-signal, California				4 40			4 40		4 40	
Steam tender for the Atlantic coast				6,696 75		13 30	6,710 05	20 80	6,689 25	
Survey of light-house sites				15,538 43		248 47	15,786 90		15,786 90	
Survey of light-house sites	1884	22	607		10,000 00	986 25	10,986 25	3,286 25		7,700 00
Steam tender for Western river lights				324 47			324 47		324 47	
Fog-signal on light-ship				521 69			521 69		521 69	
Establishment and maintenance of lights and buoys				25,000 00			25,000 00	8,500 00		16,500 00
Laboratory of the Light-House Board				3,000 00			3,000 00			3,000 00
Duplicate fog-signals for the coast of the United States				25 43			25 43		25 43	
Depot for the twelfth district				2 09			2 09		2 09	
Lighting and buoyage of the Mississippi, Missouri, and Ohio Rivers	1882			159 48			159 48	40 77	118 71	
Do	1883			748 20		26,141 13	26,889 33	26,862 85		26 48
Do	1884	22	607		175,000 00	243 60	175,243 60	161,500 00		13,743 60
Completing the lighting and buoyage of the Ohio River						3,194 07	3,194 07			3,194 07
Repayment to importers excess of deposits, act August 5, 1882				284,952 64			284,952 64	11,907 43		273,045 21
Repayment to importers excess of deposits, charges and commission cases				97,923 09			97,923 09	177 70		97,745 39
Repayment to importers excess of deposits, act of March 3, 1881						4,783 26	4,783 26		4,783 26	
Repayment to importers excess of deposits		R. S.	3689		5,056,147 30	266,281 11	5,322,428 41	5,322,428 41		
Debentures, drawbacks, bounties, or allowances, act June 6, 1880				17,439 86			17,439 86			17,439 86
Debentures, drawbacks, bounties, or allowances		R. S.	3689		3,650,959 49	205,599 69	3,856,559 18	3,856,559 18		
Debentures and other charges		R. S.	3689		54 25		54 25	54 25		
Detection and prevention of frauds upon the customs revenue	1883			649 04		1,441 50	2,090 54	2,090 54		
Do	1884			65,833 61			65,833 61	65,833 61		
Expenses of regulating immigration		22	214	104,130 53	224,286 50		328,417 03	235,443 86		92,973 17
Inspection of neat cattle shipped to foreign ports	1884	22	613	1,371 25	50,000 00	8,350 06	59,721 31	55,012 45		4,708 86
Do	1883			912 31			912 31	912 31		
Unclaimed merchandise		R. S.	3689		319 89		319 89	319 89		
Refunding moneys erroneously received and covered into the Treasury		R. S.	3689		37 31		37 31	37 31		
Total				4,578,786 00	21,502,728 79	909,775 67	26,991,290 46	23,696,061 75	661,629 77	2,633,598 94

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
INTERIOR CIVIL.										
Salaries, office of Secretary of the Interior	1884	22	555		$159,810 00		$159,810 00	$159,510 00		$300 00
Do	1883					$308 34	308 34			308 34
Do	1882			$14 36			14 36		$14 36	
Contingent expenses, Department of the Interior	1884	22	558		101,000 00	49 32	101,049 32	87,000 00		14,049 32
Do	1883			768 92		20 00	788 92	781 14		7 78
Do	1882			2 21			2 21		2 21	
Fuel, light, &c., Department of the Interior	1883					133 33	133 33	133 33		
Do	1882			161 63			161 63		161 63	
Publishing the Biennial Register		22	627		2,500 00	20	2,500 20	2,500 00		20
Rent of buildings, Department of the Interior	1884	22	559		48,760 00		48,760 00	48,760 00		
Do	1882			840 00			840 00		840 00	
Do	1881 1882			410 00			410 00		410 00	
Library, Department of the Interior	1884	22	558		500 00		500 00	500 00		
Stationery, Department of the Interior	1884	22 23	558 15		65,393 18	3,885 35	69,278 53	62,000 00		7,278 53
Do	1883			4,405 60		1,344 52	5,750 12	5,292 27		457 85
Do	1882					166 96	166 96	39 20	127 76	
Postage, Department of the Interior	1884	22	559, 563		28,000 00		28,000 00	28,000 00		
Do	1883			140 14			140 14	138 85		1 29
Do	1882			503 00			503 00		503 00	
Postage to Postal Union countries	1884	22	559		5,000 00		5,000 00	2,500 00		2,500 00
Do	1883			3,000 00		80 76	3,080 76	2,840 00		240 76
Do	1882			1,720 99			1,720 99		1,720 99	
Rent of room for Court of Claims	1885			296 71			296 71		296 71	
Salaries, General Land Office	1884	22	556		417,650 00		417,650 00	416,650 00		1,000 00
Do	1883			182 47		6,552 30	6,734 77			6,734 77
Do	1882			1,334 74			1,334 74		1,334 74	
Contingent expenses, General Land Office	1883			52 81		3,719 19	3,772 00	3,594 02		177 98
Do	1882			325 10		6 00	331 10	12 36	318 74	
Expenses of inspectors, General Land Office	1884	22	556		10,000 00		10,000 00	7,866 31		2,133 69
Library, General Land Office	1884	22	556		1,000 00		1,000 00	1,000 00		
Maps of the United States	1884	22	556		6,000 00	373 75	6,373 75	6,373 75		
General expenses, Civil Service Commission	1884	22	559		5,000 00		5,000 00	3,500 00		1,500 00
Do	1883			2,000 00			2,000 00	1,740 33		259 67
Reproducing plats of surveys, General Land Office	1884	22	623		20,000 00	373 75	20,373 75	20,373 75		

Do	1883			6,000 00		1,960 00	7,960 00	7,958 00		2 00
Do	1882			2 50			2 50		2 50	
Publishing proclamations relating to sale of lands		19	357		604 12		604 12	604 12		
Salaries temporary clerks, Department of Interior	1882			2 95			2 95		2 95	
Packing, &c., Congressional documents	1883					87	87			87
Do	1882			8 79			8 79		8 79	
Salaries, office Commissioner of Indian Affairs	1884	22	556		88,620 00		88,620 00	88,620 00		
Do	1883					16 51	16,51			16 51
Do	1882			7 54			7 54		7 54	
Salaries temporary clerks, office Commissioner of Indian Affairs	1884	22 23	624 15		7,100 00		7,100 00	7,100 00		
Do	1883 1884			3 33			3 33			3 33
Do	1882 1883			300 00		126 40	426 40	425 95		45
Rent of additional buildings, Department of the Interior						6 68	6 68		6 68	
Salaries, office Commissioner of Railroads	1884	22	558		14,620 00		14,620 00	14,620 00		
Do	1883					199 71	199 71	150 10		49 61
Do	1882			5 24			5 24		5 24	
Contingent expenses, office Commissioner of Railroads	1883					26 24	26 24	22 47		3 77
Do	1882			11 97			11 97		11 97	
Traveling expenses, office Commissioner of Railroads	1884	22	557		3,000 00		3,000 00	3,000 00		
Do	1883					422 30	422 30			422 30
Do	1882			660 18			660 18		660 18	
Salaries, office Bureau of Education	1884	22	557		44,580 00		44,580 00	44,480 00		100 00
Do	1883					235 86	235 86			235 86
Do	1882			2 36			2 36		2 36	
Contingent expenses, office Bureau of Education	1882			794 12			794 12	780 00	14 12	
Collecting statistics, office Bureau of Education	1884	22	558		2,200 00		2,200 00	1,600 00		600 00
Distributing documents, office Bureau of Education	1884	22	558		2,000 00		2,000 00	2,000 00		
Do	1883					23	23			23
Do	1882			53 64			53 64	53 00	64	
Library, office Bureau of Education	1884	22	558		1,675 00		1,675 00	1,675 00		
Salaries, office Commissioner of Pensions	1884	22	556		1,941,550 00		1,941,550 00	1,926,550 00		15,000 00
Do	1883			129,000 00		482 30	129,482 30	10,093 95		119,388 35
Do	1882			663 09			663 09		663 09	
Contingent expenses, office Commissioner of Pensions	1883					8 51	8 51	3 93		4 58
Do	1882			65 80			65 80		65 80	
Investigation of Pension cases, office Commissioner of Pensions	1884	22 23	557 15	127,000 00	240,000 00		367,000 00	333,000 00		34,000 00
Do	1882			36,378 37			36,378 37	527 00	35,851 37	
Carried forward				317,118 56	3,216,562 30	20,499 38	3,554,180 24	3,304,368 83	43,033 37	206,778 04

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
INTERIOR CIVIL—continued.										
Brought forward				$317,118 56	$3,216,562 30	$20,499 38	$3,554,180 24	$3,304,368 83	$43,033 37	$206,778 04
Additional clerks, office Commissioner of Pensions	1882			583 89			583 89		583 89	
Salaries, office Commissioner of Patents	1884	22	557		537,230 00		537,230 00	535,730 00		1,500 00
Do	1883					3,224 73	3,224 73			3,224 73
Do	1882			314 89			314 89		314 89	
Contingent expenses, office Commissioner of Patents	1883					4 31	4 31	50		3 81
Do	1882			1 37			1 37		1 37	
Scientific library, office Commissioner of Patents	1884	22	557		5,000 00		5,000 00	5,000 00		
Do	1882			2 09			2 09		2 09	
Plates for Patent Office Official Gazette	1884	22	557		35,000 00		35,000 00	35,000 00		
Do	1883					60	60			60
Do	1882			67 50			67 50		67 50	
Photolithographing, office Commissioner of Patents	1884	22	557		80,000 00		80,000 00	67,000 00		13,000 00
Do	1883					08	08			08
Do	1882			1 33			1 33		1 33	
Copies of drawings, office Commissioner of Patents	1883					201 21	201 21	200 94		27
Do	1882			9 70			9 70		9 70	
Illustrations for Patent Office Report for	1870			6,000 00			6,000 00	189 25		5,810 75
Salaries, office of Architect of the Capitol	1884	22	558		17,644 00		17,644 00	17,644 00		
Do	1883			599 80		443 03	1,042 83	1,034 90		7 93
Salaries, of employés under Architect of the Capitol	1882			2 00			2 00	2 00		
Salaries, office of Geological Survey	1884	22	558		34,940 00		34,940 00	34,923 32		16 68
Do	1883			1,211 54		49 50	1,261 04			1,261 04
Salaries, office of surveyor-general of Arizona	1884	22	560		5,500 00	1,353 50	6,853 50	6,249 21		604 29
Do	1883					90 21	90 21			90 21
Do	1882			24 47			24 47		24 47	
Contingent expenses, office of surveyor-general of Arizona	1884	22	622		1,500 00	168 25	1,668 25	1,668 25		
Do	1883					2 19	2 19			2 19
Do	1882			22 75			22 75		22 75	

Salaries, office of surveyor-general of California	1884	22	559		35,000 00		35,000 00	35,000 00		
Do	1883					12 09	12 09			12 09
Do	1882			92			92		92	
Contingent expenses, office of surveyor-general of California	1884	22	622		3,000 00		3,000 00	3,000 00		
Do	1883					15 11	15 11			15 11
Do	1882			89			89		89	
Salaries, office of surveyor-general of Colorado	1884	22	559		9,000 00		9,000 00	9,000 00		
Do	1883			260 95		52	261 47			261 47
Contingent expenses, office of surveyor-general of Colorado	1884	22	621		1,500 00		1,500 00	1,500 00		
Salaries, office of surveyor-general of Dakota	1884	22	559		11,400 00		11,400 00	11,400 00		
Do	1883					1 32	1 32			1 32
Contingent expenses, office of surveyor-general of Dakota	1884	22	621		2,000 00		2,000 00	2,000 00		
Salaries, office of surveyor-general of Florida	1884	22	559		4,800 00		4,800 00	4,800 00		
Do	1883					25	25			25
Do	1882			3 87			3 87		3 87	
Contingent expenses, office of surveyor-general of Florida	1884	22	621		1,000 00		1,000 00	1,000 00		
Do	1883					12	12			12
Do	1882			2 19			2 19		2 19	
Salaries, office of surveyor-general of Idaho	1884	22	559		5,000 00		5,000 00	5,000 00		
Do	1882			284 68			284 68		284 68	
Contingent expenses, office of surveyor-general of Idaho	1884	22	622		1,500 00		1,500 00	1,500 00		
Do	1882			3 00			3 00		3 00	
Salaries, office of surveyor-general of Louisiana	1884	22	559		15,800 00		15,800 00	15,800 00		
Do	1883			153 25		36 21	189 46	141 58		47 88
Do	1882			1 00			1 00		1 00	
Contingent expenses, office of surveyor-general of Louisiana	1884	22	621		1,000 00		1,000 00	1,000 00		
Do	1883					70	70	70		
Salaries, office of surveyor-general of Minnesota	1884	22	559		10,000 00		10,000 00	10,000 00		
Do	1883			194 07		103 95	298 02	5 49		292 53
Do	1882			85 64			85 64		85 64	
Contingent expenses, office of surveyor-general of Minnesota	1884	22	621		1,000 00		1,000 00	1,000 00		
Do	1883					83 67	83 67			83 67
Do	1882			169 14			169 14		169 14	
Salaries, office of surveyor-general of Montana	1884	22	560		10,500 00		10,500 00	10,500 00		
Do	1883					1 39	1 39			1 39
Do	1882			3 82			3 82		3 82	
Contingent expenses, office of surveyor general of Montana	1884	22	622		2,000 00		2,000 00	2,000 00		
Carried forward				327,123 31	4,047,876 30	26,292 32	4,401,291 93	4,123,658 97	44,616 51	233,016 45

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
INTERIOR CIVIL—continued.										
Brought forward				$327,123 31	$4,047,876 30	$26,292 32	$4,401,291 93	$4,123,658 97	$44,616 51	$233,016 45
Salaries, office of [surveyor-general of Nebraska and Iowa	1884	22	560		6,000 00		6,000 00	6,000 00		
Do	1883			60 44		32 18	92 62	14 56		78 06
Do	1882			116 80			116 80		116 80	
Contingent expenses, office of surveyor-general of Nebraska and Iowa	1884	22	622		1,500 00		1,500 00	1,500 00		
Do	1883					42 68	42 68	42 68		
Salaries, office of surveyor-general of Nevada	1884	22	559		5,500 00		5,500 00	5,500 00		
Do	1883			251 17		8 63	259 80			259 80
Do	1882			369 40			369 40		369 40	
Contingent expenses, office of surveyor-general of Nevada	1884	22	622		1,500 00		1,500 00	1,500 00		
Do	1882			6 43			6 43		6 43	
Salaries, office of surveyor-general of New Mexico	1884	22	559		8,500 00		8,500 00	8,500 00		
Do	1882			4 28			4 28		4 28	
Contingent expenses, office of surveyor-general of New Mexico	1884	22	622		2,500 00		2,500 00	1,500 00		1,000 00
Salaries, office of surveyor-general of Oregon	1884	22	559		7,000 00		7,000 00	7,000 00		
Contingent expenses, office of surveyor-general of Oregon	1884	22	622		1,500 00		1,500 00	1,500 00		
Do	1883			45 95		255 35	301 30			301 30
Do	1882			21 78			21 78		21 78	
Salaries, office of surveyor-general of Utah	1884	22	560		5,500 00		5,500 00	5,500 00		
Do	1883			33			33			33
Contingent expenses, office of surveyor-general of Utah	1884	22	622		1,500 00		1,500 00	1,500 00		
Do	1842					32 23	32 23		32 23	
Salaries, office of surveyor-general of Wyoming	1884	22	560		6,000 00		6,000 00	6,000 00		
Do	1882					2 41	2 41		2 41	
Do	1881					83	83		83	
Contingent expenses, office of surveyor-general of Wyoming	1884	22	622		1,500 00		1,500 00	1,500 00		
Salaries, office of surveyor-general of Washington	1884	22	559		8,000 00		8,000 00	8,000 00		

Contingent expenses, office of surveyor-general of Washington	1884	22	622		1,500 00		1,500 00	1,500 00		
Expenses of taking the census of the Territory of Minnesota						1,000 00	1,000 00		1,000 00	
Annual repairs of the Capitol	1884	22	621		54,400 00		54,400 00	54,400 00		
Do	1883					735 00	735 00	666 57		68 43
Do	1882			2 55			2 55		2 55	
Improving the Capitol grounds	1884	52	621		65,000 00		65,000 00	65,000 00		
Do	1883					69	69			69
Do	1882			1,525 47			1,525 47		1,525 47	
Lighting the Capitol and grounds	1884	22	621		30,000 00		30,000 00	28,000 00		2,000 00
Do	1883					01	01			01
Do	1882			436 84			436 84		436 84	
Senate stable and engine-house	1884	22	621		100 00		100 00	100 00		
Do	1883					2 44	2 44			2 44
Fire-proof building for the Pension Office		22	627	113,306 19	150,000 00	100 00	263,406 19	186,596 34		76,809 85
Reconstructing Interior Department building		22	621	37,000 00	60,000 00	4,000 00	101,000 00	60,000 00		41,000 00
Repair of building, Department of the Interior	1884	22	621		5,780 00		5,780 00	5,780 00		
Do	1883			780 00			780 00	780 00		
Buildings and grounds, Howard University		22	626		3,500 00		3,500 00	3,500 00		
Buildings and grounds, Government Hospital for the Insane		22	625	10,000 00	24,500 00		34,500 00	30,481 72		4,018 28
Buildings and grounds, Columbia Institution for the Deaf and Dumb		23	626		3,000 00		3,000 00	3,000 00		
Penitentiary building, Territory of Dakota				12,734 65			12,734 65	8,485 82		4,248 83
Extension of Government Printing Office				550 95			550 95	550 95		
Elevators and steam machinery, United States Senate	1883			500 00			500 00	494 67		5 33
Enlarging court-house, Washington, D. C						338 19	338 19	338 09		10
Current expenses, Government Hospital for the Insane	1884	22	625		202,500 00		202,500 00	202,500 00		
Do	1883			25,875 75		20	25,875 95	25,000 00		875 95
Do	1882			3 95			3 95		3 95	
Do	1881*					50	50		50	
Current expenses, Columbia Institution for the Deaf and Dumb		22	625		55,000 00		55,000 00	55,000 00		
Support of Freedmen's Hospital and Asylum	1884	22	626		50,000 00		50,000 00	46,500 00		3,500 00
Do	1883			500 00			500 00	171 63		328 37
Howard University, Washington, D. C	1884	22	626		15,000 00		15,000 00	15,000 00		
Additional accommodations Government Hospital for the Insane				60,000 00			60,000 00	46,000 00		14,000 00
Fire apparatus, Government Printing Office, and Hospital for the Insane				1,000 00		314 91	1,314 91	1,000 00		314 91
Maryland Institution for Instruction of the Blind		R. S.	3689		6,791 33		6,791 33	6,791 33		
Expenses of National Academy of Science relative to territorial surveys				350 00			350 00			350 00
Carried forward				592,566 24	4,831,447 63	33,158 57	5,457,172 44	5,026,853 33	48,139 98	382,179 13

*And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
INTERIOR CIVIL—continued.										
Brought forward				$592,566 24	$4,831,447 63	$33,158 57	$5,457,172 44	$5,026,853 33	$48,139 98	$382,179 13
Preservation of collections, National Museum	1884	22	629		96,000 00		96,000 00	95,000 00		1,000 00
Do	1883			7,112 82			7,112 82	7,112 82		
Preservation of collections, National Museum, Armory building	1884	22	629		2,500 00		2,500 00	2,500 00		
Do	1883					120 17	120 17	120 17		
Furniture and fixtures, National Museum	1884	22	628		60,000 00		60,000 00	58,000 00		2,000 00
Do	1883					1 00	1 00	1 00		
Heating apparatus, building for the Pension Office	1884	22	627		40,000 00		40,000 00	2,500 00		37,500 00
Repairs of adobe palace, New Mexico	1884	22	629		600 00		600 00	600 00		
Expenses of the Tenth Census		22 23	627 15	9,925 00	125,000 00		134,925 00	130,117 25		4,807 75
Protection and improvement of Yellowstone National Park	1884	22	626		40,000 00		40,000 00	40,000 00		
Do	1883			95 28			95 28	95 28		
Do	1882					95 28	95 28		95 28	
Expenses of the Tenth Census, printing and engraving	1883			3,812 80			3,812 80	3,810 08		2 72
Do	1882					133 53	133 53		133 53	
Settlement of claims for swamp lands and swamp-land indemnity	1884	22	623		15,000 00		15,000 00	14,983 27		16 73
Do	1883			320 27		2,172 75	2,493 02	1,925 68		567 34
Do	1882			144 84			144 84		144 84	
Protection and improvement of Hot Springs, Arkansas		19	380	44,291 18	30,944 07		75,235 25	57,960 84		17,274 41
Improvement of Hot Springs Reservation, Arkansas	1883			31,529 60		1,648 72	33,178 32	33,178 32		
Surveying the public lands	1882			23,494 42			23,494 42	22,481 56	1,012 86	
Do	1883			315,165 03		57 25	315,222 28	246,221 03		69,001 25
Do	1884	22	623		425,000 00		425,000 00	255,898 08		169,101 92
Surveying private land claims in Arizona	1884	22	623		8,000 00	1,206 53	9,206 53	8,131 53		1,075 00
Do	1883			2,750 00		21 98	2,771 98			2,771 98
Do	1882			3,312 02			3,312 02		3,312 02	
Surveying private land claims in California	1884	22	623		10,000 00	730 50	10,730 50	6,000 49		4,730 01
Do	1883			4,580 40		1,092 80	5,673 20	574 80		5,098 40
Do	1882			2,017 46		217 00	2,234 46		2,234 46	
Surveying private land claims in New Mexico	1884	22	623		8,000 00		8,000 00	4,500 00		3,500 00
Do	1883			6,650 00			6,650 00	2,690 83		3,959 17

Do	1882			5,944 32			5,944 32	571 21	5,373 11		
Geological Survey	1884	22	624-5		304,700 00	646 50	305,346 50	303,648 81			1,697 69
Do	1883			3,607 61		1,117 81	4,725 42	4,700 63			24 79
Illustrations for Report on Geological Survey of Territories	1881			1 54			1 54		1 54		
Examination of public surveys	1882			1,213 95			1,213 95		1,213 95		
Surveying boundary line between public lands occupied by Uncompahgre and White River Utes				500 00			500 00				500 00
Surveying boundary line, Crow Indian lands	1883			4,800 00			4,800 00	4,800 00			
Surveying agricultural lands, Crow Indian Reservation				15,000 00			15,000 00	14,723 70			276 30
Resurvey of Sioux Indian Reservation, west of Big Stone Lake, Dakota	1883			862 25			862 25				862 25
Deposits by individuals for surveying the public lands		R. S.	3689	1,268,168 75	664,111 78	10,340 43	1,942,620 96	1,126,672 35			815,948 61
Repayment for lands erroneously sold		R. S.	3689		32,699 64		32,699 64	32,699 64			
Salaries and commissions of registers and receivers	1881			13,616 98			13,616 98	1,366 50			12,250 48
Do	1881*					1,292 51	1,292 51		1,292 51		
Do	1882			7,718 04		529 93	8,247 97	2,935 71			5,312 26
Do	1883			12,439 50		7,484 39	19,923 89	14,197 81			5,726 08
Do	1884	22	622		500,000 00	5,292 90	505,292 90	491,048 64			14,244 26
Expenses of depositing public moneys	1882			1,983 35		20 00	2,003 35	1 90	2,001 45		
Do	1883			2,254 86		603 21	2,858 07	2,821 29			36 78
Do	1884	22 23	623 15		15,000 00	107 51	15,107 51	12,005 12			3,102 39
Contingent expenses of land officers	1881*					100 00	100 00		100 00		
Do	1880			20 91			20 91		20 91		
Do	1883			3,084 76		1,785 72	4,870 48	4,491 42			379 06
Do	1884	22 23	622 15		145,000 00	1,234 20	146,234 20	139,704 21			6,529 99
Depredations on public timber	1882			9 35			9 35		9 35		
Do	1883			12,345 44		1,929 52	14,274 96	14,274 72			24
Do	1884	22	623		75,000 00	113 55	75,113 55	72,998 33			2,115 22
Protecting public lands	1883 1884			39,637 68		1,814 92	41,452 60	41,168 90			283 70
Do	1884	22	623		50,000 00		50,000 00	47,924 47			2,075 53
Indemnity of swamp lands purchased by individuals		R. S.	3689		34,252 33		34,252 33	34,252 33			
Payment to John Sherman, United States marshal				351 93			351 93				351 93
Payment to William Brindle		20	541		18,838 81		18,838 81	18,838 81			
Sale of Fort Larned military reservation, Kansas				2,246 91			2,246 91	942 00			1,304 91
Relief of F. G. Schwatka and wife		23	3		6,000 00		6,000 00	6,000 00			
Relief of M. P. Jones		23	5		24,597 75		24,597 75	24,597 75			
Relief of William L. White		23	4		1,333 33		1,333 33	1,333 33			
Carried forward				2,443,575 49	7,564,025 34	75,069 18	10,082,670 01	8,439,975 94	65,085 79		1,577,608 28

*And prior years.

Statement exhibiting balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes.		Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
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INTERIOR CIVIL—continued.										
Brought forward	.....	.....	.....	$2,443,575 49	$7,564,025 34	$75,069 18	$10,082,670 01	$8,439,975 94	$65,085 79	$1,577,608 28
Relief of Ellen Call Long and Mary K. Brevard	.....	23	6	.....	8,563 37	.....	8,563 37	8,563 37	.....	.....
Five per cent. fund of net proceeds of sales of public lands in Arkansas	.....	R. S.	3689	.....	3,365 85	.....	3,365 85	3,365 85	.....	.....
Five per cent. fund of net proceeds of sales of public lands in Michigan	.....	R. S.	3689	.....	26,115 40	.....	26,115 40	26,115 40	.....	.....
Five per cent. fund of net proceeds of sales of public lands in Minnesota	.....	R. S.	3689	.....	31,507 06	.....	31,507 06	31,507 06	.....	.....
Five per cent. fund of net proceeds of sales of public lands in Oregon	.....	R. S.	3689	.....	5,277 21	.....	5,277 21	5,277 21	.....	.....
Five per cent. fund of net proceeds of sales of public lands in Nebraska	.....	R. S.	3689	.....	29,242 62	.....	29,242 62	29,242 62	.....	.....
Five per cent. fund of net proceeds of sales of public lands in Wisconsin	.....	R. S.	3689	.....	25,748 16	.....	25,748 16	25,748 16	.....	.....
Five per cent. fund of net proceeds of sales of public lands in Kansas	.....	R. S.	3689	.....	26,636 22	.....	26,636 22	26,636 22	.....	.....
Five per cent. fund of net proceeds of sales of public lands in Florida	.....	R. S.	3689	.....	11,231 28	.....	11,231 28	11,231 28	.....	.....
Five per cent. fund of net proceeds of sales of public lands in Louisiana	.....	R. S.	3689	.....	22,773 51	.....	22,773 51	22,773 51	.....	.....
Five per cent. fund of net proceeds of sales of agricultural lands in Colorado	.....	R. S.	3689	.....	4,952 51	.....	4,952 51	4,952 51	.....	.....
Two per cent. fund of net proceeds of sales of public lands in Mississippi	.....	R.S.	3689	.....	14,071 61	.....	14,071 61	14,071 61	.....	.....
Two per cent. fund of net proceeds of sales of public lands in Missouri	.....	R. S.	3689	.....	3,067 55	.....	3,067 55	3,067 55	.....	.....
Two per cent. fund of net proceeds of sales of public lands in Alabama	.....	R. S.	3689	.....	3,917 43	.....	3,917 43	3,917 43	.....	.....
Three per cent. fund of net proceeds of sales of public lands in Mississippi	.....	R. S.	3689	.....	21,107 41	.....	21,107 41	21,107 41	.....	.....
Three per cent. fund of net proceeds of sales of public lands in Missouri	.....	R. S.	3689	.....	4,601 32	.....	4,601 32	4,601 32	.....	.....
Three per cent. fund of net proceeds of sales of public lands in Alabama	.....	R. S.	3689	.....	5,876 14	.....	5,876 14	5,876 14	.....	.....
Total	.....	.....	.....	2,443,575 49	7,812,079 99	75,069 18	10,330,724 66	8,688,030 59	65,085 79	1,577,608 28

INTERNAL REVENUE.										
Rebate of taxes on tobacco		23	2		3,750,000 00		3,750,000 00	3,535,049 42		214,950 58
Assessing and collecting internal revenue	1875*			535 67			535 67			535 67
Salaries and expenses of agents and subordinate officers of internal revenue	1881*					39	39		39	
Do	1881			2,061 69			2,061 69	231 08		1,830 61
Do	1882			47,283 49		150 00	47,433 49	476 94		46,956 55
Do	1883			93,894 04		8,693 31	102,587 35	91,033 96		11,553 39
Do	1884	22	543		2,300,000 00	1,734 50	2,301,734 50	2,285,858 03		15,876 47
Redemption of stamps		R. S.	3689		294,601 54	84	294,602 38	294,602 38		
Salaries and expenses of collectors of internal revenue	1882			25 87		41 24	67 11	62 38		4 73
Do	1883			22,696 04		3,532 68	26,228 72	23,459 27		2,769 45
Do	1884	22	543		1,975,000 00	391 22	1,975,391 22	1,830,307 55		145,083 67
Repayment of taxes on distilled spirits destroyed by casualty		R. S.	3221		627 30		627 30	627 30		
Refunding taxes illegally collected		R. S.	3689		33,424 50		33,424 50	33,424 50		
Refunding moneys erroneously received and covered into the Treasury		R. S.	3689		112 03		112 03	112 03		
Refunding taxes to certain citizens of Tennessee		22	77		449 99		449 99	449 99		
Alteration of dies, plates, and stamps				9,806 08		726 00	10,532 08	10,532 08		
Stamps, paper, and dies	1882			46,973 72			46,973 72		46,973 72	
Do	1883			21,244 50		4,074 10	25,318 60	14,789 76		10,528 84
Do	1884	22	611		500,000 00	2,467 78	502,467 78	446,328 61		56,139 17
Relief of B. F. Lonergan		22	106		615 61		615 61	615 61		
Relief of Ernest F. Umland		22	160		796 71		796 71	796 71		
Relief of Columbus F. Perry and Elizabeth H. Gilmer		23	4		3,000 00		3,000 00	3,000 00		
Relief of E. S. Montell, Ex		22	163		835 20		835 20	835 20		
Relief of Charles Kortzenborn		22	163		125 00		125 00	125 00		
Punishment for violation of internal-revenue laws	1882			23,060 38			23,060 38		23,060 38	
Do	1883			18,284 06		408 01	18,692 07	11,340 54		7,351 53
Do	3884	22	611		65,000 00		65,000 00	43,692 11		21,307 89
Allowance or drawback		R. S.	3689		51,249 04		51,249 04	51,249 04		
Total				285,865 54	8,975,836 92	22,220 07	9,283,922 53	8,678,999 49	70,034 49	534,888 55
PUBLIC DEBT.										
Redemption of:										
Gold certificates, act of March 3, 1863		R. S.	3689		888,840 00		888,840 00	888,840 00		
Gold certificates, act of July 12, 1882		R. S.	3689		24,567,140 00		24,567,140 00	24,567,140 00		
Silver certificates		R. S.	3689		20,005,140 00		20,005,140 00	20,005,140 00		
Certificates of deposit, act of June 8, 1872		R. S.	3689		27,845,000 00		27,845,000 00	27,845,000 00		
Refunding certificates, act of February 26, 1879		R. S.	3688		65,900 00		65,900 00	65,900 00		
Seven-thirties of 1861		R. S.	3689		400 00		400 00	400 00		
Carried forward					73,372,420 00		73,372,420 00	73,372,420 00		

*And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes.		Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
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PUBLIC DEBT—continued.										
Brought forward					$73,372,420 00		$73,372,420 00	$73,372,420 00		
Old demand notes		R. S.	3689		545 00		545 00	545 00		
Legal-tender notes		R. S.	3689		85,948,236 00		85,948,236 00	85,948,236 00		
Fractional currency		R. S.	3689		20,629 50		20,629 50	20,629 50		
One-year notes of 1863		R. S.	3689		1,200 00		1,200 00	1,200 00		
Two-year notes of 1863		R. S.	3689		800 00		800 00	800 00		
Compound-interest notes		R. S.	3689		5,960 00		5,960 00	5,960 00		
Seven-thirties of 1864 and 1865		R. S.	3689		3,350 00		3,350 00	3,350 00		
Loan of 1858		R. S.	3689		5,000 00		5,000 00	5,000 00		
Loan of February, 1861 (1881s)		R. S.	3689		55,000 00		55,000 00	55,000 00		
Oregon war debt		R. S.	3689		650 00		650 00	650 00		
Loan of July and August, 1861 (1881s)		R. S.	3689		202,650 00		202,650 00	202,650 00		
Loan of July and August, 1861 (1881s), continued at 3½ per cent		R. S.	3689		566,250 00		566,250 00	566,250 00		
Five-twenties of 1862		R. S.	3689		4,350 00		4,350 00	4,350 00		
Loan of 1863 (1881s)		R. S.	3889		28,700 00		28,700 00	28,700 00		
Loan of 1863 (1881s) continued at 3½ per cent		R. S.	3689		422,550 00		422,550 00	422,550 00		
Ten-forties of 1864		R. S.	3689		72,300 00		72,300 00	72,300 00		
Five-twenties of June, 1864		R. S.	3689		1,000 00		1,000 00	1,000 00		
Five-twenties of 1865		R. S.	3689		1,200 00		1,200 00	1,200 00		
Consols of 1865		R. S.	3689		65,400 00		65,400 00	65,400 00		
Consols of 1867		R. S.	3689		178,850 00		178,850 00	178,850 00		
Consols of 1868		R. S.	3689		21,700 00		21,700 00	21,700 00		
Funded loan of 1881		R. S.	3689		176,650 00		176,650 00	176,650 00		
Funded loan of 1881 continued at 3½ per cent		R. S.	2689		34,550,700 00		34,550,700 00	34,550,700 00		
Loan of 1882 (three per cents), act of July 12, 1882		R. S.	3689		64,814,600 00		64,814,600 00	64,814,600 00		
Total redemptions					260,520,690 50		260,520,690 50	260,520,690 50		
Interest on:										
Refunding certificates, act of February 26, 1879		R. S	3689		12,250 21		12,250 21	12,250 21		
Navy pension fund		R. S.	3689		630,000 00		630,000 00	630,000 00		
Seven-thirties of 1861		R. S.	3689		72 06		72 06	72 06		
One-year notes of 1863		R. S.	3689		60 00		60 00	60 00		
Two-year notes of 1863		R. S.	3689		77 92		77 92	77 92		
Compound-interest notes		R. S	3689		1,156 24		1,156 24	1,156 24		

Seven-thirties of 1864 and 1865	.....	R. S.	3689	.....	545 15	.....	545 15	545 15	.....	.....
Loan of 1858	.....	R. S.	3689	.....	2,750 00	.....	2,750 00	2,750 00	.....	.....
Loan of February, 1861 (1881s)	.....	R. S.	3689	.....	1,860 00	.....	1,860 00	1,860 00	.....	.....
Oregon war debt	.....	R. S.	3689	.....	48 00	$345 00	393 00	48 00	$345 00	.....
Loan of July and August, 1861 (1881s)	.....	R. S.	3689	.....	15,616 50	.....	15,616 50	15,616 50	.....	.....
Loan of July and August, 1861 (1881s), continued at 3½ per cent	.....	R. S.	3689	.....	8,372 73	.....	8,372 73	8,372 73	.....	.....
Five-twenties of 1862	.....	R. S.	3689	.....	796 25	51 00	847 25	847 25	.....	.....
Loan of 1863 (1881s)	.....	R. S.	3689	.....	4,659 00	.....	4,659 00	4,659 00	.....	.....
Loan of 1863 (1881s) continued at 3½ per cent	.....	R. S.	3689	.....	3,394 41	.....	3,394 41	3,394 41	.....	.....
Ten-forties of 1864	.....	R. S.	3689	.....	6,808 47	117 50	6,925 97	6,925 97	.....	.....
Five-twenties of June, 1864	.....	R. S.	3689	.....	6 97	.....	6 97	6 97	.....	.....
Five-twenties of 1865	.....	R. S.	3689	.....	2,893 94	.....	2,893 94	2,893 94	.....	.....
Consols of 1865	.....	R. S.	3689	.....	12,600 86	64 50	12,665 36	12,665 36	.....	.....
Consols of 1867	.....	R. S.	3689	.....	22,494 63	45 00	22,539 63	22,539 63	.....	.....
Consols of 1868	.....	R. S.	3689	.....	579 20	.....	579 20	579 20	.....	.....
Central Pacific stock	.....	R. S.	3689	.....	1,552,327 20	.....	1,552,327 20	1,552,327 20	.....	.....
Kansas Pacific stock (U. P. E. D.)	.....	R. S.	3689	.....	378,150 00	.....	378,150 00	378,150 00	.....	.....
Union Pacific stock	.....	R. S.	3689	.....	1,631,490 72	.....	1,631,490 72	1,631,490 72	.....	.....
Central Branch Union Pacific stock (A. & P. P.)	.....	R. S.	3689	.....	95,640 00	.....	95,640 00	95,640 00	.....	.....
Western Pacific stock	.....	R. S.	3689	.....	118,233 60	.....	118,233 60	118,233 60	.....	.....
Sioux City and Pacific stock	.....	R. S.	3689	.....	97,639 20	.....	97,639 20	97,639 20	.....	.....
Funded loan of 1881	.....	R. S.	3689	.....	9,444 10	.....	9,444 10	9,444 10	.....	.....
Funded loan of 1881 continued at 3½ per cent	.....	R. S.	3689	.....	570,149 27	.....	570,149 27	570,149 27	.....	.....
Funded loan of 1891	.....	R. S.	3689	.....	11,196,269 73	74 49	11,196,344 22	11,196,344 22	.....	.....
Funded loan of 1907	.....	R. S.	3689	.....	29,518,375 31	4,160 69	29,522,536 00	29,522,536 00	.....	.....
Loan of 1882 (three per cents), act of July 12, 1882	.....	R. S.	3689	.....	8,683,961 81	2,063 00	8,686,024 81	8,686,024 81	.....	.....
Total interest	.....	.....	.....	.....	54,578,723 48	6,921 18	54,585,644 66	54,585,299 66	345 00	.....
Total redemption and interest	.....	.....	.....	.....	315,099,413 98	6,921 18	315,106,335 16	315,105,990 16	345 00	.....
INTERIOR—INDIANS.										
Pay of Indian agents	1884	22	433–434	.....	89,400 00	619 60	90,019 60	82,353 73	.....	$7,665 87
Do	1883	.....	.....	$8,464 95	.....	493 70	8,958 65	2,736 38	.....	6,222 27
Do	1882	.....	.....	8,513 53	.....	.....	8,513 53	1,856 74	6,656 79	.....
Pay of Indian agents....(transfer account)	1881*	22	418	.....	129 17	4,095 64	4,224 81	4,224 81	.....	.....
Pay of Indian agents	1881*	....	.....	.....	.....	1,112 58	1,112 58	.....	1,112 58	.....
Do	1879*	.....	.....	970 10	.....	.....	970 10	176 49	.....	793 61
Pay of Indian police	1884	22	448	.....	70,000 00	436 42	70,436 42	60,870 91	.....	9,565 51
Do	1883	.....	.....	9,218 80	.....	976 91	10,195 71	4,642 17	.....	5,553 54
Do	1882	.....	.....	44	.....	.....	44	.....	44	.....
Pay of Indian police....(transfer account)	1881*	.....	.....	.....	.....	02	02	02	.....	.....
Pay of Indian police	1881	.....	.....	.....	.....	68 00	68 00	.....	68 00	.....
Carried forward	.....	.....	.....	27,167 82	159,529 17	7,802 87	194,499 86	156,861 25	7,837 81	29,800 80

*And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes.		Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
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INTERIOR—INDIANS—continued.										
Brought forward				$27,167 82	$159,529 17	$7,802 87	$194,499 86	$156,861 25	$7,837 81	$29,800 80
Pay of interpreters	1884	22	434		20,000 00	201 28	20,201 28	19,631 02		570 26
Do	1883			1,980 72		487 59	2,468 31	823 92		1,644 39
Do	1882			2,628 86		121 44	2,750 30	1 00	2,749 30	
Pay of interpreters (transfer account)	1881*					2,009 16	2,009 16	2,009 16		
Pay of interpreters	1881*					141 47	141 47		141 47	
Pay of Indian inspectors	1884	22	434		15,000 00	494 50	15,494 50	14,491 80		1,002 70
Do	1883			1,738 00			1,738 00			1,738 00
Do	1882			329 67			329 67		329 67	
Traveling expenses of Indian inspectors	1884	22	434		6,000 00	418 97	6,418 97	5,912 61		506 33
Do	1883			1,107 17		718 08	1,825 25	387 90		1,437 35
Do	1882			503 95		55 06	559 01	21 15	537 86	
Do	1879*			45 00			45 00			45 00
Pay of Indian school superintendent	1884	22	434		3,000 00		3,000 00	3,000 00		
Pay of Indian school inspector	1883			138 59			138 59			138 59
Traveling expenses of Indian school superintendent	1884	22	434		1,500 00		1,500 00	1,408 50		91 50
Traveling expenses Indian school inspector	1883			27 62			27 62	27 62		
Buildings at agencies and repairs	1884	22	434		20,000 00	95 19	20,095 19	19,877 20		217 99
Do	1883			2,254 74		2,307 67	4,562 41	3,706 66		855 75
Do	1882					194 48	194 48	194 48		
Buildings at agencies and repairs (transfer account)	1881*					525 30	525 30	525 30		
Contingencies, Indian Department	1884	22	434		40,500 00	965 51	41,465 51	40,975 27		490 24
Do	1883			2,870 06		3,254 41	6,124 47	4,633 60		1,490 87
Do	1882			27 12		145 34	172 46	171 86	60	
Contingencies, Indian Department (transfer account)	1881*	22	418		18 00	2,808 00	2,826 00	2,826 00		
Contingencies, Indian Department	1881*					320 09	320 09		320 09	
Do	1880			145 10			145 10	8 50		136 60
Do	1879*			3 77			3 77	3 77		
Expenses of Indian commissioners	1884	22	434		2,000 00		2,000 00	2,000 00		
Do	1883			100 00		439 10	539 10	25 95		513 15
Do	1882			369 47			369 47			369 47
Telegraphing and purchase of Indian supplies	1884	22	449		26,109 97	170 05	26,280 02	26,279 00		1 02
Do	1882			941 48		81 25	1,022 73	86 05	936 68	

Telegraphing and purchase of Indian supplies (transfer account)	1881*					12 24	12 24	12 24		
Telegraphing and purchase of Indian supplies	1881*					6 49	6 49		6 49	
Do	1883			4,914 91		130 64	5,045 55	5,043 75		1 80
Transportation of Indian supplies	1884	22	450		275,000 00	1,681 06	276,681 06	227,027 22		49,653 84
Do	1883			32,320 51		6,207 21	38,527 72	17,792 02		20,735 70
Do	1882			15,106 72		57 93	15,164 65	15,164 65		
Do	1881			1,154 03			1,154 03	1,154 03		
Transportation of Indian supplies (transfer account)	1881*					2,413 08	2,413 08	2,413 08		
Transportation of Indian supplies	1881*					159 79	159 79		159 79	
Do	1880			1,940 74			1,940 74	823 25		1,117 49
Do	1879*			463 15			463 15	53 60		409 55
Vaccination of Indians	1884	22	449		800 00		800 00	201 00		599 00
Do	1883			94 25			94 25	35 00		59 25
Do	1882			69 65			69 65		69 65	
Fulfilling treaties with—										
Apaches, Kiowas, and Comanches		22	435	13,511 81	30,000 00	1,226 72	44,738 53	35,850 50		8,888 03
Arapahoes and Cheyennes of Upper Arkansas River				406 29		622 28	1,028 57			1,028 57
Cheyennes and Arapahoes		22	435	15,537 13	20,000 00		35,537 13	32,575 00		2,962 13
Chickasaws		22	435		3,000 00		3,000 00	3,000 00		
Chippewas, Bois Forte band		22	435	20,814 59	14,100 00	594 70	35,509 29	13,032 54		22,476 75
Chippewas of Lake Superior				11			11			11
Chippewas of the Mississippi		22	435	29 45	21,000 00	2,168 00	23,197 45	23,168 00		29 45
Chippewas, Pillagers, and Lake Winnebagoshish bands		22	435	2,297 43	22,666 66	1,390 47	26,354 56	20,396 12		5,958 44
Chippewas of Red Lake and Pembina tribe of Chippewas				2,655 64		5 78	2,661 42			2,661 42
Chippewas of Saginaw, Swan Creek, and Black River				313 61			313 61			313 61
Choctaws		22	435	7,500 00	30.032 89		37,532 89	37,532 89		
Choctaws and Chickasaws				8,356 69			8,356 69	6,589 10		1,767 59
Confederated tribes and bands in Middle Oregon				204 93			204 93	100 00		104 93
Creeks		22	435		69,968 40		69,968 40	69,968 40		
Crows		22	435	46,617 92	30,000 00	402 50	77,020 42	45,144 80		31,875 62
Delawares				50			50			50
Iowas		22	438	6 44	2,875 00	316 08	3,197 52	2,076 02		1,121 50
Kansas		22	438	2,104 73	10,000 00	280 50	12,385 23	9,672 04		2,713 19
Kickapoos		22	438	665 81	4,679 05	371 25	5,716 11	3,563 99		2,152 12
Makahs				257 74			257 74			257 74
Miamis of Eel River		22	439	236 59	1,100 00		1,336 59	1,023 61		312 98
Miamis of Indiana				14,536 99		454 18	14,991 17	7,599 32		7,391 85
Miamis of Kansas		22	438	127 38	1,768 29	8 55	1,904 22	878 12		1,026 10
Navajoes						1 18	1 18			1 18
Nez Percés				7,269 30		229 38	7,498 68	3,450 10		4,048 58
Carried forward				241,894 18	830,647 43	42,496 82	1,115,038 43	891,229 99	13,089 41	210,719 03

*And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes.		Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
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INTERIOR—INDIANS—continued.										
Brought forward				$241,894 18	$830,647 43	$42,496 82	$1,115,038 43	$891,229 99	$13,089 41	$210,719 03
Fulfilling treaties with—										
Omahas		22	439	7,814 96	10,000 00	110 31	17,925 27	9,239 83		8,685 44
Osages		22	439	3,851 25	18,456 00	143 57	22,450 82	22,186 50		264 32
Otoes and Missourias		22	440	50	5,000 00	21 70	5,022 20	4,675 23		346 97
Pawnees		22	440	4,576 83	30,000 00	691 36	35,268 19	30,490 85		4,777 34
Poncas		22	440	1,817 69	8,000 00	4 43	9,822 12	6,587 31		3,234 81
Pottawatomies		28	440-1	865 77	20,647 65	1 09	21,514 51	20,513 34		1,001 17
Pottawatomies of Huron		22	441		400 00		400 00	400 00		
Quapaws		22	441	228 44	1,000 00		1,228 44	1,063 62		164 82
Sacs and Foxes of the Mississippi		22	441	4,922 72	51,000 00	3,959 91	59,882 63	48,447 25		11,435 38
Sacs and Foxes of the Missouri		22	441		7,870 00	3 70	7,873 70	7,873 70		
Seminoles		22	441-2		28,500 00		28,500 00	28,500 00		
Senecas		22	442		3,690 00	1,580 00	5,270 00	3,640 00		1,630 00
Senecas of New York		22	442		11,902 50	333 09	12,235 59	11,902 50		333 09
Shawnees		22	442	272 96	5,000 00		5,272 96	5,000 00		272 96
Eastern Shawnees		22	443	1,300 52	1,030 00	50 81	2,381 33	673 23		1,708 10
Shoshones		22	443	1,025 86	11,000 00	405 38	12,431 24	9,001 52		3,429 72
Sioux of Dakota				248 83			248 83			248 83
Sioux of Yankton tribe		22	444	6,784 58	25,000 00	198 88	31,983 46	18,839 09		13,144 37
Sisseton, Wahpeton, and Santee Sioux, of Lake Traverse and Devil's Lake				2,562 51		3,803 58	6,366 09	6,047 80		318 29
Six Nations of New York		22	443	204 86	4,500 00	1,182 86	5,887 72	5,675 53		212 19
S'Klallams				584 75			584 75			584 75
Snakes, Wa-pah-pee tribe				536 51			536 51			536 51
Winnebagoes		22	445	201,153 57	44,162 47	479 60	245,795 64	74,068 37		171,727 27
Wyandottes				288 80			288 80			288 80
Yakamas				13,090 26			13,090 26	5,243 48		7,846 78
Cherokees, proceeds of diminished-reserve lands in Kansas				724,137 41			724,137 41			724,137 41
Cherokees, proceeds of school lands				860 34			860 34			860 34
Cherokees, proceeds of lands		R. S.	2093-6		40,000 00		40,000 00	40,000 00		
Kansas, proceeds of lands				32,203 18			32,203 18			32,203 18
Menomonees, proceeds of lands				6,255 69			6,255 69	5,909 53		346 16
Miamies of Kansas, proceeds of lands		R. S.	2093-6	579 24	14,392 17		14,971 41	1,757 57		13,213 84
Omahas, proceeds of lands				712 26			712 26			712 26
Otoes and Missourias, proceeds of lands				219,503 45			219,503 45			219,503 45
Pawnees, proceeds of lands				471,855 68			471,855 68	302,626 22		169,229 46

Pottawatomies, proceeds of lands				32,767 63			32,767 63	182 69		32,584 94
Sacs and Foxes of Missouri, proceeds of lands				19,420 18		148 30	19,568 48	2,737 06		16,831 42
Shawnees, proceeds of lands				1,270 56			1,270 56			1,270 56
Winnebagoes, proceeds of lands				20,621 61			20,621 61			20,621 61
Claims of settlers on Round Valley Indian Reservation				594 37			594 37			594 37
Proceeds of Choctaw orphan reservation		R. S.	2093-6	482 88	1,125 16		1,608 04	1,608 04		
Proceeds of New York Indian lands in Kansas				2,873 63		1,184 43	4,058 06			4,058 06
Proceeds of Sioux Reservation in Minnesota and Dakota				195,619 49		5,905 37	201,524 86	89,654 44		111,870 42
Civilization fund		R. S.	2093-6	18,686 30	2,369 63	4,092 33	25,148 26	6,924 24		18,224 02
Interest on Cherokee asylum fund		R. S.	2093-6		3,207 36		3,207 36	3,207 36		
Interest due Cherokees on lands sold to Osages		R. S.	2093-6		36,206 88		36,206 88	36,206 88		
Cherokee asylum fund				64,147 17			64,147 17			64,147 17
Cherokee national fund				427,242 20			427,242 20			427,242 20
Interest on Cherokee national fund		R. S.	2093-6		30,760 42		30,760 42	30,760 42		
Interest on Cherokee national fund	1884	22	450		26,060 00		26,060 00	26,060 00		
Interest on Cherokee school fund		R. S.	2093-6		26,006 44		26,006 44	26,006 44		
Interest on Cherokee school fund	1884	22	450		2,410 00		2,410 00	2,410 00		
Cherokee school fund				457,903 72			457,903 72			457,903 72
Cherokee orphan fund				228,835 43			228,835 43			228,835 43
Interest on Cherokee orphan fund		R. S.	2093-6		12,775 16		12,775 16	12,775 16		
Interest on Chickasaw national fund		R. S.	2093-6	2,500 00	48,469 28		50,969 28	48,469 28		2,500 00
Interest on Chickasaw national fund	1884	22	450		19,820 00		19,820 00	19,820 00		
Chickasaw national fund				959,678 82			959,678 82			959,678 82
Interest on Chickasaw incompetent fund		R. S.	2093-6	2,100 00	100 00		2,200 00			2,200 00
Chippewa and Christian Indians				42,560 36			42,560 36			42,560 36
Interest on Chippewa and Christian Indians		R. S.	2093-6	81	2,128 02	16 77	2,145 60	2,128 02		17 58
Choctaw school fund				49,472 70			49,472 70			49,472 70
Interest on Choctaw school fund		R. S.	2093-6		2,473 64		2,473 64	2,473 64		
Choctaw general fund				3,689 00			3,689 00			3,689 00
Interest on Choctaw general fund		R. S.	2093-6		184 44		184 44	184 44		
Do	1884	22	450		27,000 00		27,000 00	27,000 00		
Choctaw orphan fund		R. S.	2093-6		1,608 04		1,608 04			1,608 04
Creek orphan fund						114 74	114 74			114 74
Interest on Creek orphan fund						383 27	383 27			383 27
Delaware general fund				673,894 64			673,894 64			673,894 64
Interest on Delaware general fund		R. S.	2093-6		36,651 74	5,772 16	42,423 90	42,423 90		
Do	1884	22	450		8,930 00		8,930 00	8,930 00		
Delaware school fund				11,000 00			11,000 00			11,000 00
Interest on Delaware school fund		R. S.	2093-6	10,433 89	550 00		10,983 89			10,983 89
Iowa fund				116,543 37			116,543 37			116,543 37
Interest on Iowa fund		R. S.	2093-6	2,638 66	5,827 16	97 28	8,563 10	6,543 00		
Do	1884	22	450		3,520 00		3,520 00	3,520 00		2,020 10
Kansas school fund				27,174 41			27,174 41			27,174 41
Interest on Kansas school fund		R. S.	2093-6	13,432 78	1,358 72		14,791 50	6,023 63		8,767 87
Carried forward				5,335,718 21	1,471,740 31	73,181 74	6,880,640 26	1,967,641 10	13,089 41	4,899,909 75

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes.		Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
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INTERIOR—INDIANS—continued.										
Brought forward	.....	.....	.....	$5,335,718 21	$1,471,740 31	$73,181 74	$6,880,640 26	$1,967,641 10	$13,089 41	$4,899,909 75
Kakaskia, Peoria, Wea, and Piankeshaw fund	.....	.....	.....	2,700 92	.....	.....	2,700 92	.....	.....	2,700 92
Interest on Kaskaskia, Peoria, Wea, and Piankeshaw fund	.....	R. S.	2093–6	.....	135 04	.....	135 04	.....	.....	135 04
Do	1884	22	450	.....	4,801 00	.....	4,801 00	4,801 00	.....	.....
Kaskaskia, Peoria, Wea, and Piankeshaw school fund	.....	.....	.....	20,711 97	.....	.....	20,711 97	.....	.....	20,711 97
Interest on Kaskaskia, Peoria, Wea, and Piankeshaw school fund	....	R. S.	2093–6	555 77	1,035 68	215 96	1,807 41	347 20	.....	1,460 21
Do	1884	22	450	.....	1,449 00	.....	1,449 00	.....	.....	1,449 00
Do	1883	.....	.....	954 00	.....	.....	954 00	951 25	.....	2 75
Do	1882	.....	.....	383 75	.....	.....	383 75	383 75	.....	.....
Kickapoo general fund	.....	.....	.....	128,571 78	.....	.....	128,571 78	.....	.....	128,571 78
Interest on Kickapoo general fund	.....	R. S.	2093–6	2,416 55	6,428 58	38 24	8,883 37	6,735 42	.....	2,147 95
L'Anse and Vieux de Sert Chippewa fund	.....	.....	.....	20,000 00	.....	.....	20,000 00	.....	.....	20,000 00
Interest on L'Anse and Vieux de Sert Chippewa fund	.....	R. S.	2093–6	1,022 54	1,000 00	7 75	2,030 29	.....	.....	2,030 29
Menomonee fund	.....	.....	.....	134,039 38	.....	.....	134,039 38	.....	.....	134,039 38
Interest on Menomonee fund	.....	R. S.	2093–6	4,477 97	6,701 96	155 50	11,335 43	7,375 29	.....	3,960 14
Do	1884	22	450	.....	950 00	.....	950 00	950 00	.....	.....
Osage fund	.....	R. S.	2093–6	3,516,820 39	353,491 49	.....	3,870,311 88	.....	.....	3,870,311 88
Interest on Osage fund	.....	R. S.	2093–6	373,199 97	162,429 66	687 93	536,317 56	166,500 80	.....	369,816 76
Osage school fund	.....	.....	.....	119,911 53	.....	.....	119,911 53	.....	.....	119,911 53
Interest on Osage school fund	.....	R. S.	2003–6	3,088 21	5,995 58	408 60	9,492 39	3,778 81	.....	5,713 58
Interest on Otoe and Missouria fund	.....	R. S.	2093–6	7,844 10	10,979 50	1,177 16	20,000 76	13,116 58	.....	6,884 18
Ottawa and Chippewa fund	.....	.....	.....	16,956 25	.....	.....	16,956 25	.....	.....	16,956 25
Interest on Ottawa and Chippewa fund	.....	R. S.	2093–6	37,084 51	847 82	.....	37,932 33	.....	.....	37,932 33
Do	1884	22	450	.....	230 00	.....	230 00	.....	.....	230 00
Do	1883	.....	.....	230 00	.....	.....	230 00	.....	.....	230 00
Do	1882	.....	.....	230 00	.....	.....	230 00	.....	230 00	.....
Ponca fund	.....	.....	.....	70,000 00	.....	.....	70,000 00	.....	.....	70,000 00
Interest on Ponca fund	.....	R. S.	2093–6	34 78	3,500 00	29 66	3,564 44	3,500 00	.....	64 44
Pottawatomie education fund	.....	.....	.....	72,993 93	.....	.....	72,993 93	.....	.....	72,993 93
Interest on Pottawatomie education fund	.....	R. S.	2093–6	1,785 52	3,849 70	493 65	6,128 87	3,480 94	.....	2,647 93
Pottawatomie general fund	.....	.....	.....	89,618 57	.....	.....	89,618 57	.....	.....	89,618 57
Interest on Pottawatomie general fund	.....	R. S.	2093–6	31,823 87	4,480 92	.....	36,304 79	7,130 00	.....	29,174 79
Pottawatomie mills fund	.....	.....	.....	17,482 07	.....	.....	17,482 07	.....	.....	17,482 07
Interest on Pottawatomie mills fund	.....	R. S.	2093–6	332 05	874 10	.....	1,206 15	398 44	.....	807 71

Sacs and Foxes of the Mississippi fund				55,058 21			55,058 21			55,058 21
Interest on Sacs and Foxes of the Mississippi fund		R.S.	2093-6	8,497 63	2,752 90		11,250 53	11,250 53		
Sacs and Foxes of the Missouri fund				21,659 12			21,659 12			21,659 12
Interest on Sacs and Foxes of the Missouri fund		R.S.	2093-6	3,087 32	1,082 96		4,170 28			4,170 28
Seneca fund				40,979 60			40,979 60			40,979 60
Interest on Seneca fund		R.S.	2093-6		2,048 98	1,024 49	3,073 47	2,048 98		1,024 49
Seneca fund, Tonawanda band				86,950 00			86,950 00			86,950 00
Interest on Senaca fund, Tonawanda band		R.S.	2093-6	4,366 91	4,347 50	478 87	9,193 28	4,347 50		4,845 78
Seneca and Shawnee fund				15,140 42			15,140 42			15,140 42
Interest on Seneca and Shawnee fund		R.S.	2093-6	18 43	757 02	209 11	984 56	775 45		209 11
Shawnee fund				1,985 65			1,985 65			1 985 65
Interest on Shawnee fund		R.S.	2093-6	256 27	99 28		355 55			355 55
Eastern Shawnee fund				9,160 19			9,160 19	81 07		9,079 12
Interest on Eastern Shawnee fund		R.S.	2093-6	26 10	453 96	58 91	538 97	480 06		58 91
Shoshone and Bannock fund				6,000 00			6,000 00			6,000 00
Interest on Shoshone and Bannock fund		R.S.	2093-6	148 36	300 00		448 36			448 36
Stockbridge consolidated fund				75,886 04			75,886 04			75,886 04
Interest on Stockbridge consolidated fund		R.S.	2093-6		3,794 30	144 71	3,939 01	3,939 01		
Ute five per cent. fund				500,000 00			500,000 00			500,000 00
Interest on Ute five per cent. fund		R.S.	2093-6	15,362 35	25,000 00	164 48	40,526 83	4,312 20		36,214 63
Ute four per cent. fund				1,250,000 00			1,250,000 00			1,250,000 00
Interest on Ute four per cent. fund		R.S.	2093-6	06	50,000 00	1,959 08	51,959 14	43,459 09		8,500 05
Payment to North Carolina Cherokees		R.S.	2093-6	35,887 49	1,780 95		37,668 44	1,977 22		35,691 22
Incidental expenses Indian service in—										
Arizona	1884	22	447		22,000 00	260 41	22,260 41	20,644 10		1,616 31
Do	1883			191 64		2,130 09	2,321 73	1,340 79		980 94
Do	1882			1,450 57		791 03	2,241 60	117 22	2,124 38	
Do	1881*					438 62	438 62		438 62	
California	1884	22	447		29,000 00	52 17	29,052 17	25,560 43		3,491 74
Do	1883			48 45		171 10	219 55	28 76		190 79
Do	1882			897 20		10 06	907 26		907 26	
Do	1881*	22	418		1 00	†3,140 93	3,141 93	3,141 93		
Do (transfer)	1881*					47 82	47 82		47 82	
Colorado	1884	22	447		1,500 00		1,500 00	1,458 44		41 56
Do	1883			259 35			259 35	250 00		9 35
Do	1882			598 18		309 65	907 83	108 97	798 86	
Dakota	1884	22	447		5,000 00	346 95	5,346 95	4,690 55		656 40
Do	1883			153 69		686 41	840 10	150 44		689 66
Do	1882			3,274 34		150 00	3,424 34	150 00	3,274 34	
Do	1881*					240 65	240 65		240 65	
Do (transfer)	1881*					428 47	428 47	428 47		
Do	1879			110 60			110 60	57 60		53 00
Idaho	1884	22	477		1,000 00		1,000 00	964 00		36 00
Do	1883			275 50		61 95	337 45			337 45
Do	1882			1,896 94		2 50	1,899 44		1,899 44	
Do	1881*					28	28		28	
Carried forward				12,150,615 20	2,191,839 19	89,704 93	14,432,159 32	2,318,853 39	23,051 06	12,090,254 87

*And prior years.

† This amount, repayment, was transferred from War ledger.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriation, July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
INTERIOR—INDIANS—continued.										
Brought forward	.....	.....	.....	$12,150,615 20	$2,191,839 19	$89,704 93	$14,432,159 32	$2,318,853 39	$23,051 06	$12,090,254 87
Incidental expenses Indian service in—										
Montana	1884	22	447	.....	5,000 00	100 00	5,100 00	5,100 00	.....	.....
Do	1883	.....	.....	1,145 65	.....	1,347 75	2,493 40	553 20	.....	1,940 20
Do	1882	.....	.....	1,076 53	.....	194 10	1,270 63	.....	1,270 63	.....
Do	1881*	.....	.....	.....	.....	3 98	3 98	.....	3 98	.....
Do (transfer)	1881*	.....	.....	.....	.....	3 98	3 98	3 98	.....	.....
Nevada	1884	22	447	.....	13,000 00	.....	13,000 00	12,600 73	.....	399 27
Do	1883	.....	.....	77 80	.....	225 81	303 61	90 00	.....	213 61
Do	1882	.....	.....	3 68	.....	.....	3 68	.....	3 68	.....
Do	1881	.....	.....	.....	.....	4 13	4 13	.....	4 13	.....
New Mexico	1884	22	447	.....	5,000 00	167 32	5,167 32	5,089 53	.....	77 79
Do	1883	.....	.....	25 00	.....	424 70	449 70	.....	.....	449 70
Do	1882	.....	.....	436 06	.....	5 50	441 56	273 50	168 06	.....
Do	1881*	.....	.....	.....	.....	2 79	2 79	.....	2 79	.....
Do	1879*	.....	.....	92 96	.....	.....	92 96	.....	.....	92 96
Oregon	1884	22	448	.....	22,000 00	.....	22,000 00	16,555 59	.....	5,444 41
Do	1883	.....	.....	1,813 70	.....	650 29	2,463 99	1,275 20	.....	1,188 79
Do	1882	.....	.....	9 25	.....	79 55	88 80	.....	88 80	.....
Do	1881*	.....	.....	.....	.....	7 00	7 00	.....	7 00	.....
Do	1881†	.....	.....	.....	.....	231 30	231 30	231 30	.....	.....
Utah	1884	22	448	.....	10,000 00	89 15	10,089 15	9,539 13	.....	550 02
Do	1883	.....	.....	118 03	.....	479 38	597 41	60 50	.....	536 91
Do	1882	.....	.....	.....	.....	299 40	299 40	.....	299 40	.....
Washington	1884	22	448	.....	15,000 00	336 02	15,336 02	14,031 27	.....	1,304 75
Do	1883	.....	.....	18 16	.....	687 81	705 97	50 50	.....	655 47
Do	1882	.....	.....	200 70	.....	.....	200 70	19 50	181 20	.....
Do	1881*	.....	.....	.....	.....	23	23	.....	23	.....
Do (transfer)	1881*	.....	.....	.....	.....	200 36	200 36	200 36	.....	.....
Wyoming	1884	22	488	.....	1,500 00	52 24	1,552 24	600 00	.....	952 24
Do	1883	.....	.....	1,791 65	.....	14 70	1,806 35	.....	.....	1,806 35
Do	1882	.....	.....	893 73	.....	2 42	896 15	.....	896 15	.....
Support of Apaches, Kiowas, and Comanches.	1884	22	435	.....	22,700 00	.....	22,700 00	22,700 00	.....	.....
Do	1883	.....	.....	119 50	.....	445 59	565 09	.....	.....	565 09
Do	1882	.....	.....	106 18	.....	2 91	109 09	1 50	107 59	.....
Do	1881*	.....	.....	.....	.....	349 75	349 75	.....	349 75	.....

Support of Apaches of Arizona and New Mexico	1882	.....	.....	11,896 85	.....	11 35	11,908 20	76 80	11,831 40	.....
Do	1881	.....	.....	6,566 00	.....	.....	6,566 00	6,517 37	.....	48 63
Do	1881*	.....	.....	.....	.....	240 96	240 96	.....	240 96	.....
Do	1880*	.....	.....	368 50	.....	.....	368 50	368 50	.....	.....
Support of Arapahoes, Cheyennes, Apaches, Kiowas, Comanches, and Wichitas	1884	22	445	.....	413,000 00	861 41	413,861 41	382,594 49	.....	31,266 92
Do	1883	.....	.....	3,159 57	.....	819 05	3,978 62	3,239 57	.....	739 05
Do	1882	.....	.....	.....	.....	55 50	55 50	.....	55 50	.....
Do	1881*	.....	.....	.....	.....	40	40	40	.....	.....
Support of Arickarees, Gros Ventres, and Mandans	1884	22	446	.....	38,000 00	505 11	38,505 11	37,856 42	.....	648 69
Do	1883	.....	.....	1,469 20	.....	809 38	2,278 58	139 00	.....	2,139 58
Do	1882	.....	.....	1,598 01	.....	.....	1,598 01	.....	1,598 01	.....
Support of Assinaboines in Montana	1884	22	446	.....	15,000 00	132 13	15,132 13	14,977 27	.....	154 86
Do	1883	.....	.....	81 36	.....	65 89	147 25	.....	.....	147 25
Do	1882	.....	.....	76 67	.....	.....	76 67	.....	76 67	.....
Support of Blackfeet, Bloods, and Piegans	1884	22	446	.....	35,000 00	728 02	35,728 02	34,792 65	.....	935 37
Do	1883	.....	.....	325 01	.....	990 99	1,316 00	325 00	.....	991 00
Do	1882	.....	.....	1,391 25	.....	.....	1,391 25	.....	1,391 25	.....
Support of Cheyennes and Arapahoes	1884	22	435	.....	20,600 00	.....	20,600 00	20,565 75	.....	34 25
Do	1883	.....	.....	1 90	.....	.....	1 90	.....	.....	1 90
Do	1882	.....	.....	125 10	.....	.....	125 10	.....	125 10	.....
Do	1881*	.....	.....	.....	.....	751 01	751 01	751 01	.....	.....
Support of Chippewas of Lake Superior	1884	22	446	.....	15,000 00	4 25	15,004 25	12,995 73	.....	2,008 52
Do	1883	.....	.....	21	.....	202 31	202 52	.....	.....	202 52
Do	1882	.....	.....	350 82	.....	.....	350 82	17 50	333 32	.....
Do	1881*	.....	.....	.....	.....	301 00	301 00	.....	301 00	.....
Support of Chippewas of the Mississippi	1884	22	435-6	.....	4,000 00	.....	4,000 00	3,816 47	.....	183 53
Do	1883	.....	.....	2 92	.....	55 41	58 33	.....	.....	58 33
Do	1882	.....	.....	877 33	.....	14 95	892 28	.....	892 28	.....
Do	1881*	.....	.....	.....	.....	375 43	375 43	375 43	.....	.....
Support of Chippewas, Pillagers, and Lake Winnebagoshish bands	1884	22	436	.....	2,500 00	.....	2,500 00	2,401 84	.....	98 16
Do	1883	.....	.....	.....	.....	232 04	232 04	.....	.....	232 04
Do	1882	.....	.....	701 81	.....	.....	701 81	.....	701 81	.....
Support of Chippewas of Red Lake and Pembina tribes	1884	22	446	.....	15,000 00	383 97	15,383 97	15,240 03	.....	143 94
Do	1883	.....	.....	.....	.....	319 97	319 97	.....	.....	319 97
Do	1882	.....	.....	1,137 24	.....	29 10	1,166 34	.....	1,166 34	.....
Support of Chippewas of Turtle Mountain band	1884	22	449	.....	9,000 00	.....	9,000 00	7,564 23	.....	1,435 77
Do	1883 / 1884	22	.....	595 90	.....	.....	595 90	.....	.....	595 90
Support of Chippewas on White Earth Reservation	1884	22	446	.....	8,000 00	.....	8,000 00	7,922 44	.....	77 56
Carried forward	.....	.....	.....	12,189,269 43	2,861,139 19	104,002 72	15,154,411 34	2,960,367 08	45,148 09	12,148,896 17

* And prior years.

Statement exhibiting the balances of appropritaions unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 3, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
INTERIOR—INDIANS—continued.										
Brought forward	.....	.....	.....	$12,189,269 43	$2,861,139 19	$104,002 72	$15,154,411 34	$2,960,367 08	$45,148 09	$12,148,896 17
Support of Chippewas on White Earth Reservation	1883	.....	.....	33 06	.....	85 89	118 95	116 00	.....	2 95
Do	1882	.....	.....	530 30	.....	.....	530 30	.....	530 30	.....
Support of confederated tribes and bands in Middle Oregon	1884	22	446	.....	7,000 00	32 59	7,032 59	7,002 08	.....	30 51
Do	1883	.....	.....	93 67	.....	426 71	520 38	135 00	.....	385 38
Do	1882	.....	.....	87 64	.....	.....	87 64	.....	87 64	.....
Support of Crows	1884	22	437	.....	75,000 00	715 67	75,715 67	74,659 26	.....	1,056 41
Do	1883	.....	.....	.....	.....	432 87	432 87	.....	.....	432 87
Do	1882	.....	.....	18,537 35	.....	22 82	18,560 17	.....	18,560 17	.....
Do	1881*	.....	.....	.....	.....	307 97	307 97	.....	307 97	.....
Support of D' Wamish and other allied tribes in Washington	1884	22	446	.....	8,000 00	50	8,000 50	7,022 62	.....	977 88
Do	1883	.....	.....	3,072 16	.....	462 14	3,534 30	3,422 84	.....	111 46
Do	1882	.....	.....	428 40	.....	.....	428 40	.....	428 40	.....
Do	1881*	.....	.....	.....	.....	10 00	10 00	.....	10 00	.....
Support of Flatheads and other confederated tribes	1884	22	446	.....	13,000 00	.....	13,000 00	12,947 93	.....	52 07
Do	1883	.....	.....	1,646 46	.....	123 17	1,769 63	.....	.....	1,769 63
Do	1882	.....	.....	1 51	.....	.....	1 51	.....	1 51	.....
Support of Gros Ventres in Montana	1884	22	446	.....	18,000 00	268 47	18,268 47	18,243 98	.....	24 49
Do	1883	.....	.....	1,553 43	.....	151 30	1,704 73	1,516 77	.....	157 96
Do	1882	.....	.....	780 27	.....	.....	780 27	.....	780 27	.....
Support of Indians in Arizona and New Mexico	1884	22	445	.....	300,000 00	239 73	300,239 73	273,039 97	.....	27,199 76
Support of Indians of Central Superintendency	1884	22	446	.....	18,000 00	185 09	18,185 09	13,696 33	.....	4,488 76
Do	1883	.....	.....	95 55	.....	165 22	260 77	123 75	.....	137 02
Do	1882	.....	.....	758 79	.....	.....	758 79	.....	758 79	.....
Do	1881*	.....	.....	.....	.....	174 74	174 74	174 74	.....	.....
Support of Indians of Fort Hall Reservation	1884	22	446	.....	20,000 00	2,230 64	22,230 64	19,943 42	.....	2,287 22
Do	1883	.....	.....	2,995 20	.....	188 05	3,183 25	1,366 26	.....	1,816 99
Support of Indians of Fort Peck Agency	1884	22	446	.....	70,000 00	762 34	70,762 34	69,234 06	.....	1,528 28
Do	1883	.....	.....	3,783 00	.....	188 43	3,971 43	3,586 04	.....	385 39
Do	1882	.....	.....	1,380 92	.....	.....	1,380 92	.....	1,380 92	.....
Support of Indians in Idaho	1882	.....	.....	959 29	.....	41 50	1,000 79	.....	1,000 79	.....

Support of Indians of Klamath Agency	1884	22	446		6,000 00		6,000 00	5,834 81		165 19
Do	1883			565 02		99	566 01			566 01
Support of Indians of Lemhi Agency	1884	22	446		19,000 00	179 54	19,179 54	17,828 40		1,351 14
Do	1883			1,070 80		220 74	1,291 54	1,037 97		253 57
Support of Indians of San Carlos Reservation	1883			32,540 15		967 49	33,507 64	31,616 40		1,891 24
Support of Indians in Southeastern Oregon	1882			25 00			25 00		25 00	
Support of Indian schools	1884	22	448		400,000 00	1,908 27	401,908 27	309,120 03		92,788 24
Support of Indian school near Arkansas City	1881	22	449		20,000 00		20,000 00	20,000 00		
Support of Indian school at Carlisle, Pa	1884	22	448		68,500 00	10,986 40	79,486 40	79,486 40		
Do	1883					80 00	80 00	80 00		
Support of Indian schools at Forest Grove, Oreg	1884	22	448		30,000 00	270 00	30,270 00	30,000 00		270 00
Do	1883			11,288 56		1,602 72	12,891 28	6,411 48		6,479 80
Support of Indian school at Genoa, Nebr	1884	22	449		20,000 00		20,000 00	14,300 26		5,699 74
Support of Indian children at Hampton School, Va	1884	22	448		16,700 00		16,700 00	14,972 48		1,727 52
Do	1883			2,162 24			2,162 24	1,369 40		792 84
Support of Indian children at schools and in private families				100,501 04		7,670 54	108,171 58	42,796 96		65,374 62
Support of Indian children at schools in States	1884	22	449		75,000 00		75,000 00	35,939 88		39,060 12
Do	1883			12,872 63			12,872 63	4,451 87		8,420 76
Support of Jicarilla and Mescalero Apaches, including Mescaleros	1883			5,240 96		260 27	5,501 23	124 95		5,376 28
Support of Kansas Indians	1884	22	446		5,000 00		5,000 00	4,999 96		04
Do	1883					122 31	122 31			122 31
Do	1882			105 26			105 26		105 26	
Do	1881*					3 47	3 47		3 47	
Support of Kickapoos	1884	22	438		6,000 00	13 29	6,013 29	5,065 71		947 58
Do	1883			2,661 95		3 80	2,665 75	556 40		2,109 35
Do	1882			11 65			11 65		11 65	
Do	1881*					838 27	838 27	838 27		
Support of Klamaths and Modocs	1884	22	438		6,100 00		6,100 00	6,083 78		16 22
Do	1883			23 00		3 59	26 59			26 59
Do	1881*					73	73		73	
Support of Makahs	1884	22	446		5,000 00	687 99	5,687 99	3,495 91		2,192 08
Do	1883			888 38		45 00	933 38	254 04		679 34
Do	1881*					67 18	67 18		67 18	
Support of Menomonees	1884	22	446		5,000 00		5,000 00	4,993 51		6 49
Do	1883					798 20	798 20			798 20
Do	1882			422 41			422 41		422 41	
Support of mixed Shoshones, Bannocks, and Sheepeaters	1882			295 37			295 37		295 37	
Do	1881*					4 28	4 28		4 28	
Do (transfer account)	1881*					21 25	21 25	21 25		
Support of Modocs in Indian Territory	1884	22	447		5,000 00	4 92	5,004 92	4,525 94		478 98
Do	1883			18 60			18 60			18 60
Carried forward				12,396,699 45	4,077,439 19	137,979 80	16,612,118 44	4,112,834 19	69,930 20	12,429,354 05

*And prior years.

Statement exhibiting balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
INTERIOR—INDIANS—continued.										
Brought forward				$12,396,699 45	$4,077,439 19	$137,979 80	$16,612,118 44	$4,112,834 19	$69,930 20	$12,429,354 05
Support of Modocs in Indian Territory	1882			32 64			32 64		32 64	
Support of Molels	1884	22	439		3,000 00		3,000 00	2,906 60		93 40
Do	1882			1,576 46			1,576 46		1,576 46	
Support of Moquis Pueblos	1883			46 84		210 18	257 02	179 38		77 64
Support of Navajoes	1884	22	447		30,000 00		30,000 00	30,000 00		
Do	1883			18 48		210 81	229 29			229 29
Do	1882			800 85			800 85		800 85	
Support of Nez Percés	1884	22	439		3,500 00		3,500 00	3,395 00		105 00
Do	1883					9 95	9 95			9 95
Do	1882			1,049 74			1,049 74		1,019 74	
Support of Nez Percés of Joseph's band	1884	22	447		20,000 00	271 09	20,271 09	18,723 24		1,547 85
Do	1883			167 58		60 90	228 48			228 48
Do	1882			214 79			214 79	183 42	31 37	
Support of Northern Cheyennes and Arapahoes	1884	22	439		53,000 00	589 31	53,589 31	52,849 81		739 50
Do	1883			15,892 77		184 51	16,077 28	10,348 05		5,729 23
Do	1882			8,168 80			8,168 80	144 68	8,024 12	
Do	1879*			60 00			60 00			60 00
Support of Pawnees	1884	22	440		17,100 00	487 91	17,587 91	17,074 06		513 85
Do	1883			1,315 91		220 79	1,536 70	464 83		1,071 87
Do	1882			2,370 69			2,370 69		2,370 69	
Support of Poncas	1884	22	440		29,500 00	210 44	29,710 44	27,884 99		1,825 45
Do	1883			3,035 87		366 15	3,402 02	3,035 87		366 15
Do	1882					337 20	337 20		337 20	
Support of Pueblos of New Mexico	1883			58 41		1,569 45	1,625 86	59 09		1,566 77
Support of Quapaws	1884	22	441		1,060 00		1,060 00	253 42		806 58
Do	1883			888 57			888 57			888 57
Support of Qui-nai-elts and Qni-leh-utes	1884	22	447		5,000 00		5,000 00	3,558 78		1,441 22
Do	1883			573 35		180 00	753 35			753 35
Do	1882			569 62		2 00	571 62		571 62	
Do	1881*					1 50	1 50		1 50	
Support of Sacs and Foxes of Missouri	1884	22	441		200 00		200 00	166 00		34 00
Support of Shoshones and Bannocks	1884	22	443		29,437 00	55 00	29,492 00	28,752 89		739 11
Do	1883			8,425 13		278 09	8,703 22	5,580 18		3,123 04
Do	1882			10,190 47			10,190 47	113 11	10,077 36	
Support of schools not otherwise provided for	1883			4,840 05		6,881 60	11,721 65	10,702 47		1,019 18

Do	1882			1,853 62		5 76	1,859 38	2 00	1,857 38	
Do	1881*					4 57	4 57		4 57	
Do (transfer account)	1881*					1 49	1 49	1 49		
Support of Shoshones in Wyoming	1884	22	447		15,000 00	674 43	15,674 43	15,614 08		60 35
Do	1883			1,455 56		25 33	1,480 89	1,432 60		48 29
Do	1882			1,330 99		77 11	1,408 10		1,408 10	
Support of Sioux of Devil's Lake	1884	22	447		8,000 00	164 66	8,164 66	8,164 66		
Support of Sioux of different tribes, including Santee Sioux of Nebraska	1884	22	444		1,737,300 00	8,436 79	1,745,736 79	1,577,390 30		168,346 49
Do	1883			254,709 59		19,710 09	274,419 68	256,039 34		18,380 34
Do	1882			1,585 97		429 98	2,015 95	119 07	1,896 88	
Do	1881*					173 02	173 02		173 02	
Do (transfer account)	1881*	22	418		10 32	†273 52	283 84	283 84		
Support of Sioux of Lake Traverse	1884	22	447		8,000 00		8,000 00	7,995 53		4 47
Support of Sioux of Yankton tribe	1884	22	444		45,000 00	278 78	45,278 78	45,278 67		11
Do	1883			339 45		624 25	963 70	36 00		927 70
Do	1882			558 73			558 73	235 46	323 27	
Do	1881*					298 73	298 73		298 73	
Support of S'Klallams	1884	22	447		5,000 00	157 50	5,157 50	4,677 27		480 23
Do	1883					2 04	2 04			2 04
Do	1882*			1,913 19			1,913 19		1,913 19	
Support of Tontawas at Fort Griffin, Texas	1884	22	447		3,000 00		3,000 00	3,000 00		
Do	1882					70	70		70	
Do	1881*					6 95	6 95		6 95	
Support of Utahs, Tabequache band	1884	22	445		720 00	13 69	733 69	720 00		13 69
Do	1883			53 87			53 87			53 87
Do	1882			80 38			80 38		80 38	
Support of confederated band of Utes	1884	22	445		73,020 00	345 70	73,365 70	71,236 21		2,129 49
Do	1883			1,826 52		446 26	2,272 78	271 47		2,001 31
Do	1882			1,388 09		176 72	1,564 81	159 13	1,405 68	
Support of Walla Walla, Cayuse, and Umatilla tribes	1884	22	447		8,000 00	16 30	8,016 30	6,686 80		1,329 50
Do	1883			28 34			28 34			28 34
Do	1882			1,486 28			1,486 28		1,486 28	
Support of Wichitas and other affiliated bands	1883			5 04		3 40	8 44	3 40		5 04
Do	1882			6 79		71	7 50	71	6 79	
Support of Yakamas and other Indians	1884	22	447		20,000 00	98 81	20,098 81	20,009 35		89 46
Do	1883			538 32		311 46	849 78	513 20		336 58
Do	1882			1,232 70		2 82	1,235 52		1,235 52	
Additional beef, Indian service	1883			60,476 73		3,000 00	63,476 73	48,431 29		15,045 44
Appeal in Crow Dog case to United States Supreme Court				1,000 00			1,000 00	1,000 00		
Appraisal and survey of Otoe and Missouria lands (reimbursable)				1,100 00		227 15	1,327 15	219 00		1,108 15
Carried forward				12,789,964 63	6,192,286 51	186,095 40	19,168,346 54	6,398,730 93	106,901 19	12,662,714 42

*And prior years.

†$141.75 transferred from War ledger.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specifi objects of appropriations.	Year.	Statutes.		Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
		Vol.	Page or section.							
INTERIOR—INDIANS—continued.										
Brought forward	.....	.....	.....	$12,789,964 63	$6,192,286 51	$186,095 40	$19,168,346 54	$6,398,730 93	$106,901 19	$12,662,714 42
Appraisal and sale of land in Nebraska belonging to the Omaha, Pawnee, Otoe, and Missouria tribe of Indians (reimbursable—transfer account)	1874*	22	418	.....	644 94	.....	644 94	644 94	.....	.....
Civilization of Winnebagoes	.....	.....	.....	513 10	.....	.....	513 10	.....	.....	513 10
Consolidating Indian agencies	1884	22	449	.....	10,000 00	.....	10,000 00	5,285 00	.....	4,715 00
Expenses for special agents for Miamies of Indiana	.....	.....	.....	224 27	.....	.....	224 27	.....	.....	224 27
Expenses of the Ute Commission	.....	.....	.....	4,029 37	.....	18 90	4,048 27	2,100 81	.....	1,947 46
Gratuity to certain Ute Indians	.....	22	445	666 67	4,000 00	100 00	4,766 67	4,666 66	.....	100 01
Indian school buildings	.....	22	448, 624	.....	25,000 00	711 19	25,711 19	15,110 43	.....	10,600 76
Indian school buildings near Arkansas City	.....	.....	.....	24,750 00	.....	.....	24,750 00	22,331 70	.....	2,418 30
Maintaining peace among and with the various tribes and bands of Indians (transfer account)	1873*	.....	.....	4,561 26	.....	.....	4,561 26	3,355 48	.....	1,205 78
Maintenance and education of Catherine and Sophia Germain	.....	20	602	2,625 00	31 25	.....	2,656 25	2,625 00	.....	31 25
Maintenance and education of Adelaide and Julia German	.....	18	424	5,125 00	250 00	.....	5,375 00	250 00	.....	5,125 00
Maintenance and education of Helen and Heloise Lincoln	.....	16	377	5,468 75	187 50	.....	5,656 25	3,093 75	.....	2,562 50
Negotiating with Sioux for modification of treaties	.....	.....	.....	10,971 56	.....	.....	10,971 56	5,000 00	.....	5,971 56
Payment to citizens, Miamies of Kansas	.....	.....	.....	751 69	.....	.....	751 69	.....	.....	751 69
Payment of indemnity to Poncas	.....	.....	.....	10,703 14	.....	.....	10,703 14	2,000 00	.....	8,703 14
Payment to Old Settlers or Western Cherokees	.....	.....	.....	449 30	.....	.....	449 30	.....	.....	449 30
Payment to Pottawatomie citizens	.....	.....	.....	5,289 45	.....	.....	5,289 45	.....	.....	5,289 45
Payment to Ute Indians for individual improvements	.....	.....	.....	9,200 00	.....	150 00	9,350 00	250 00	.....	9,100 00
Purchase of wagons, teams, tools, &c., for Northern Superintendency	1873*	.....	.....	.....	.....	53 76	53 76	.....	53 76	.....
Reimbursement to Creek Orphan fund	.....	.....	.....	.....	.....	723 80	723 80	.....	.....	723 80
Reimbursement to Osages for losses sustained	.....	.....	.....	2,451 50	.....	.....	2,451 50	.....	.....	2,451 50
Relief of destitute Indians in Nevada	.....	.....	.....	4,500 00	.....	.....	4,500 00	1,150 00	.....	3,350 00

Relief of Louisa Boddy		23	1		5,400 00		5,400 00	5,400 00		
Relief of Indians at Crow, Fort Belknap, Fort Peck, and Blackfeet Agencies		23	267		100,000 00		100,000 00	71,022 11		28,977 89
Removal of Pawnees (reimbursable)				7,135 79			7,135 79	7,135 79		
Removal and support of confed. band Utes				91,602 81		6,696 63	98,299 44	74,342 05		23,957 39
Removal and support of Otoes and Missourias				60,272 14			60,272 14	171 36		60,100 78
Reservoir at headwaters of the Mississippi						15,664 00	15,664 00			15,664 00
School building and support of school for Indians of Sioux Reservation, Dakota				24,480 50			24,480 50	24,194 84		285 66
Stock cattle for Indian industrial schools	1884	22	448		20,000 00		20,000 00	4,510 00		15,490 00
Stock cattle or sheep for Indian tribes	1884	22	448		50,000 00		50,000 00	21,059 44		28,940 56
Survey and appraisement of Omaha lands†				2,500 00		1,671 06	4,171 06	4,171 06		
Survey and appraisement of Umatilla lands†				3,500 00			3,500 00	3,500 00		
Survey of Indian reservations				5,000 00			5,000 00	2,500 00		2,500 00
Total				13,076,735 93	6,407,800 20	211,884 74	19,696,420 87	6,684,601 35	106,954 95	12,904,864 57
INTERIOR—PENSIONS.										
Army pensions	1884	22	431	24,584,003 17	85,000,000 00	15,397,946 04	124,981,949 21	69,499,030 54		55,482,918 67
Do	1883					6,749 41	6,749 41	6,749 41		
Do	1882			11,213,399 94		3,017 16	11,216,417 10	581 00	11,215,836 10	
Do	1881*					120,421 02	120,421 02		120,421 02	
Pay and allowances, Army surgeons	1884	22	431		287,000 00	30,508 34	317,508 34	289,700 00		27,808 34
Do	1883			5,002 72		5,158 24	10,160 96			10,160 96
Do	1882			16,055 86			16,055 86		16,055 86	
Do	1881*					1,196 73	1,196 73		1,196 73	
Fees of examining surgeons, Army pensions	1884	22 23	431 151		712,000 00	44,533 06	756,533 06	752,832 60		3,700 46
Do	1883 1884			1 00			1 00			1 00
Fees for examining surgeons, Army pensions	1883	23	15		253,538 17	759 50	254,297 67	248,174 76		6,122 91
Do	1882			23,374 13		12 00	23,386 13	16 00	23,370 13	
Do	1881*					866 00	866 00		866 00	
Contingent expenses of agents, Army pensions	1884	22	431		5,000 00	329 60	5,329 60	5,323 19		6 41
Do	1883 1884			4,889 45		439 50	5,328 95	1,177 11		4,151 84
Do	1883			15 71			15 71			15 71
Arrears of Army pensions				362,588 46		82,163 75	444,752 21	73,530 74		371,221 47
Fees for vouchers, arrears of Army pensions				911 60		115 80	1,027 40	45 00		982 40
Arrears of Navy pensions				36,521 09		24,781 53	61,302 62	10,000 00		51,302 62
Fees for vouchers, arrears of Navy pensions				76 80		36 50	113 30	2 00		111 30
Navy pensions	1884	22	431	921,812 17	429,813 00	719,574 62	2,071,199 79	967,272 22		1,103,927 57
Do	1883					254 96	254 96	254 96		
Do	1882			373,839 92			373,839 92		373,839 92	
Do	1881*					1,255 10	1,255 10		1,255 10	
Do	1880*			132 65			132 65	132 65		
Carried forward				37,542,624 67	86,687,351 17	16,440,118 86	140,670,094 70	71,854,822 18	11,752,840 86	57,062,431 66

*And prior years.

†Reimbursable.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specifi objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
INTERIOR—INDIANS—continued.										
Brought forward	.....	.....	.....	$12,789,964 63	$6,192,286 51	$186,095 40	$19,168,346 54	$6,398,730 93	$106,901 19	$12,662,714 42
Appraisal and sale of land in Nebraska belonging to the Omaha, Pawnee, Otoe, and Missouria tribe of Indians (reimbursable—transfer account)	1874*	22	418	.....	644 94	.....	644 94	644 94	.....	.....
Civilization of Winnebagoes	.....	.....	.....	513 10	.....	.....	513 10	.....	.....	513 10
Consolidating Indian agencies	1884	22	449	.....	10,000 00	.....	10,000 00	5,285 00	.....	4,715 00
Expenses for special agents for Miamies of Indiana	.....	.....	.....	224 27	.....	.....	224 27	.....	.....	224 27
Expenses of the Ute Commission	.....	.....	.....	4,029 37	.....	18 90	4,048 27	2,100 81	.....	1,947 46
Gratuity to certain Ute Indians	.....	22	445	666 67	4,000 00	100 00	4,766 67	4,666 66	.....	100 01
Indian school buildings	.....	22	448, 624	.....	25,000 00	711 19	25,711 19	15,110 43	.....	10,600 76
Indian school buildings near Arkansas City	.....	.....	.....	24,750 00	.....	.....	24,750 00	22,331 70	.....	2,418 30
Maintaining peace among and with the various tribes and bands of Indians (transfer account)	1873*	.....	.....	4,561 26	.....	.....	4,561 26	3,355 48	.....	1,205 78
Maintenance and education of Catherine and Sophia Germain	.....	20	602	2,625 00	31 25	.....	2,656 25	2,625 00	.....	31 25
Maintenance and education of Adelaide and Julia German	.....	18	424	5,125 00	250 00	.....	5,375 00	250 00	.....	5,125 00
Maintenance and education of Helen and Heloise Lincoln	.....	16	377	5,468 75	187 50	.....	5,656 25	3,093 75	.....	2,562 50
Negotiating with Sioux for modification of treaties	.....	.....	.....	10,971 56	.....	.....	10,971 56	5,000 00	.....	5,971 56
Payment to citizens, Miamies of Kansas	.....	.....	.....	751 69	.....	.....	751 69	.....	.....	751 69
Payment of indemnity to Poncas	.....	.....	.....	10,703 14	.....	.....	10,703 14	2,000 00	.....	8,703 14
Payment to Old Settlers or Western Cherokees	.....	.....	.....	449 30	.....	.....	449 30	.....	.....	449 30
Payment to Pottawatomie citizens	.....	.....	.....	5,289 45	.....	.....	5,289 45	.....	.....	5,289 45
Payment to Ute Indians for individual improvements	.....	.....	.....	9,200 00	.....	150 00	9,350 00	250 00	.....	9,100 00
Purchase of wagons, teams, tools, &c., for Northern Superintendency	1873*	.....	.....	.....	.....	53 76	53 76	.....	53 76	.....
Reimbursement to Creek Orphan fund	.....	.....	.....	.....	.....	723 80	723 80	.....	.....	723 80
Reimbursement to Osages for losses sustained	.....	.....	.....	2,451 50	.....	.....	2,451 50	.....	.....	2,451 50
Relief of destitute Indians in Nevada	.....	.....	.....	4,500 00	.....	.....	4,500 00	1,150 00	.....	3,350 00

Relief of Louisa Boddy	------	23	1	----------	5,400 00	----------	5,400 00	5,400 00	----------	----------
Relief of Indians at Crow, Fort Belknap, Fort Peck, and Blackfeet Agencies	------	23	267	----------	100,000 00	----------	100,000 00	71,022 11	----------	28,977 89
Removal of Pawnees (reimbursable)	----	------	----------	7,135 79	----------	----------	7,135 79	7,135 79	----------	----------
Removal and support of confed. band Utes	------	------	----------	91,602 81	----------	6,696 63	98,299 44	74,342 05	----------	23,957 39
Removal and support of Otoes and Missourias	------	------	----------	60,272 14	----------	----------	60,272 14	171 36	----------	60,100 78
Reservoir at headwaters of the Mississippi	------	------	----------	----------	----------	15,664 00	15,664 00	----------	----------	15,664 00
School building and support of school for Indians of Sioux Reservation, Dakota	------	------	----------	24,480 50	----------	----------	24,480 50	24,194 84	----------	285 66
Stock cattle for Indian industrial schools	1884	22	448	----------	20,000 00	----------	20,000 00	4,510 00	----------	15,490 00
Stock cattle or sheep for Indian tribes	1884	22	448	----------	50,000 00	----------	50,000 00	21,059 44	----------	28,940 56
Survey and appraisement of Omaha landst	------	------	----------	2,500 00	----------	1,671 06	4,171 06	4,171 06	----------	----------
Survey and appraisement of Umatilla landst	----	------	----------	3,500 00	----------	----------	3,500 00	3,500 00	----------	----------
Survey of Indian reservations	----	------	----------	5,000 00	----------	----------	5,000 00	2,500 00	----------	2,500 00
Total	----	------	----------	13,076,735 93	6,407,800 20	211,884 74	19,696,420 87	6,684,601 35	106,954 95	12,904,864 57
INTERIOR—PENSIONS.										
Army pensions	1884	22	431	24,584,003 17	85,000,000 00	15,397,946 04	124,981,949 21	69,499,030 54	----------	55,482,918 67
Do	1883	------	----------	----------	----------	6,749 41	6,749 41	6,749 41	----------	----------
Do	1882	------	----------	11,213,399 94	----------	3,017 16	11,216,417 10	581 00	11,215,836 10	----------
Do	1881*	------	----------	----------	----------	120,421 02	120,421 02	----------	120,421 02	----------
Pay and allowances, Army surgeons	1884	22	431	----------	287,000 00	30,508 34	317,508 34	289,700 00	----------	27,808 34
Do	1883	------	----------	5,002 72	----------	5,158 24	10,160 96	----------	----------	10,160 96
Do	1882	------	----------	16,055 86	----------	----------	16,055 86	----------	16,055 86	----------
Do	1881*	------	----------	----------	----------	1,196 73	1,196 73	----------	1,196 73	----------
Fees of examining surgeons, Army pensions	1884	{22 {23	431 151	----------	712,000 00	44,533 06	756,533 06	752,832 60	----------	3,700 46
Do	{1883 {1884	------	----------	1 00	----------	----------	1 00	----------	----------	1 00
Fees for examining surgeons, Army pensions	1883	23	15	----------	253,538 17	759 50	254,297 67	248,174 76	----------	6,122 91
Do	1882	------	----------	23,374 13	----------	12 00	23,386 13	16 00	23,370 13	----------
Do	1881*	------	----------	----------	----------	866 00	866 00	----------	866 00	----------
Contingent expenses of agents, Army pensions	1884	22	431	----------	5,000 00	329 60	5,329 60	5,323 19	----------	6 41
Do	{1883 {1884	------	----------	4,889 45	----------	439 50	5,328 95	1,177 11	----------	4,151 84
Do	1883	------	----------	15 71	----------	----------	15 71	----------	----------	15 71
Arrears of Army pensions	------	------	----------	362,588 46	----------	82,163 75	444,752 21	73,530 74	----------	371,221 47
Fees for vouchers, arrears of Army pensions	------	------	----------	911 60	----------	115 80	1,027 40	45 00	----------	982 40
Arrears of Navy pensions	------	------	----------	36,521 09	----------	24,781 53	61,302 62	10,000 00	----------	51,302 62
Fees for vouchers, arrears of Navy pensions	------	------	----------	76 80	----------	36 50	113 30	2 00	----------	111 30
Navy pensions	1884	22	431	921,812 17	429,813 00	719,574 62	2,071,199 79	967,272 22	----------	1,103,927 57
Do	1883	------	----------	----------	----------	254 96	254 96	254 96	----------	----------
Do	1882	------	----------	373,839 92	----------	----------	373,839 92	----------	373,839 92	----------
Do	1881*	------	----------	----------	----------	1,255 10	1,255 10	----------	1,255 10	----------
Do	1880*	------	----------	132 65	----------	----------	132 65	132 65	----------	----------
Carried forward	------	------	----------	37,542,624 67	86,687,351 17	16,440,118 86	140,670,094 70	71,854,822 18	11,752,840 86	57,062,431 66

*And prior years.

†Reimbursable.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
INTERIOR—PENSIONS—continued.										
Brought forward				$37,542,624 67	$86,687,351 17	$16,440,118 86	$140,670,094 70	$71,854,822 18	$11,752,840 86	$57,062,431 66
Pay and allowance, Navy pensions	1884	22	431		3,000 00		3,000 00	2,900 00		100 00
Do	1883			6,512 26		917 44	7,429 70			7,429 70
Do	1882			1,043 18			1,043 18		1,043 18	
Fees of examining surgeons, Navy pensions	1884	23	15		13,000 00		13,000 00	11,100 00		1,900 00
Do	1883			960 00		416 32	1,376 32			1,376 32
Do	1882			1,351 50			1,351 50		1,351 50	
Navy pension fund				32,928 71			32,928 71			32,928 71
Relief of Mary L. and Ella Walker		23	3		1,858 50		1,858 50	1,858 50		
Total				37,585,420 32	86,705,209 67	16,441,452 62	140,732,082 61	71,870,680 68	11,755,235 54	57,106,166 39
MILITARY ESTABLISHMENT.										
Pay of the Army	1880*			120,826 43			120,826 43	3,775 94		117,050 49
Do	1881*			400,000 00		90,908 28	490,908 28	162,209 68	90,908 28	237,790 32
Do (transfer account)	1881*					4,109 82	4,109 82	4,109 82		
Do	1882			235,439 55		28,957 51	264,397 06	42,956 85	221,440 21	
Do	1883			154,457 52		201,998 73	356,456 25	39,205 41		317,250 84
Do	1884	22	457		11,900,000 00	127,514 98	12,027,514 98	11,972,750 71		54,764 27
Mileage of the Army	1882			984 78		2,267 49	3,252 27	740 88	2,511 39	
General expenses of the Army	1882			35,297 39		8,720 23	44,017 62	183 57	43,834 05	
Collecting, drilling, and organizing volunteers (transfer account)	1871*					30 21	30 21	30 21		
Do	1871*					99 79	99 79		99 79	
Secret service fund (transfer account)	1871*					4,955 78	4,955 78	4,955 78		
Draft and substitute fund	1871*					24 93	24 93		24 93	
Pay of the Military Academy	1882			49,461 15			49,461 15		49,461 15	
Do	1883			14,832 50		11,412 70	26,245 20			26,245 20
Do	1884	22	416		217,432 50	81 23	217,513 73	207,000 00		10,513 73
Collection and payment of bounty, prize money, &c., colored soldiers and sailors	1881 / 1882					21 42	21 42		21 42	
Do	1883					1,010 52	1,010 52			1,010 52
Do	1884	22	618		2,900 00		2,900 00	1,500 00		1,400 00
Bounty to Fifteenth and Sixteenth Missouri Cavalry Volunteers		21	283		26,000 00		26,000 00	26,000 00		
Bounty to volunteers and regulars on enlistment	1871*					51 94	51 94		51 94	

Bounty to volunteers, their widows and legal heirs	1871*			150,000 00		2,694 37	152,694 37	150,000 00	2,694 37	
Transportation of officers and their baggage.	1871*					194 14	194 14		194 14	
Pay of two and three year volunteers (transfer account)	1871*					959 91	959 91	959 91		
Do	1871*			150,000 00		5,995 49	155,995 49	123,098 56	5,995 49	26,901 44
Subsistence of the Army	1881*					101 20	101 20		101 20	
Do (transfer account)	1881*					85 20	85 20	18 80	66 40	
Do (transfer account)	1882					18 48	18 48		18 48	
Do	1882			26,617 30		1,227 54	27,844 84	4,507 22	23,337 62	
Do	1883			75,925 88		24,788 85	100,714 73	1,060 49		99,654 24
Do (transfer account)	1883					7 85	7 85		7 85	
Do	1884	22	457		1,900,000 00	44,098 09	1,944,098 09	1,485,395 00		458,703 09
Regular supplies of the Quartermaster's Department	1879			267 75			267 75			267 75
Do	1880			2,630 25			2,630 25			2,630 25
Do	1881*					5,431 60	5,431 60		5,431 60	
Do (transfer account)	1881*					39 69	39 69	39 69		
Do	1882			88,328 42		505 09	88,833 51	608 97	88,224 54	
Do	1882			61,906 68		35,767 87	97,674 55	77,370 39		20,304 16
Do (transfer account)	1883					3 36	3 36		3 36	
Do	1884	22	457		2,940,000 00	92,961 56	3,032,961 56	2,890,308 54		142,653 02
Incidental expenses	1878			1,459 87			1,459 87			1,459 87
Do (transfer account)	1881*					35 31	35 31	35 31		
Do	1881*					587 73	587 73		587 73	
Do	1882			13,894 98		2,028 20	15,923 18	4,670 08	11,253 10	
Do	1883			59,286 27		5,775 78	65,062 05	37,126 58		27,935 47
Do (transfer account)	1883					1 50	1 50		1 50	
Do	1884	22	458		650,000 00	324 57	650,324 57	650,178 01		146 56
Barracks and quarters (transfer account)	1881					5,192 73	5,192 73	5,192 73		
Do	1881					858 28	858 28		858 28	
Do	1882			1,396 76		568 60	1,965 36	308 13	1,657 23	
Barracks and quarters	1883			1,459 84		3,549 30	5,009 14	1,274 63		3,734 51
Do	1884	22	459		700,000 00	7 35	700,007 35	698,355 08		1,652 27
Fifty per centum of arrears of Army transportation due certain land-grant railroads	1881			8,325 61			8,325 61	8,325 61		
Do	1882			10,486 08			10,486 08	10,486 08		
Do	1883			76,276 52			76,276 52	50,379 36		25,897 16
Do	1884	22	458		125,000 00	18 60	125,018 60	20,226 39		104,792 21
Transportation of the Army and its supplies (transfer account)	1881*					†4,889 58	4,889 58	1,525 00	3,364 58	
Do	1881					2,305 43	2,305 43		2,305 43	
Do	1882			342,542 51		26,327 92	368,870 43	12,399 72		356,470 71
Do (transfer account)	1882					17 30	17 30		17 30	
Do	1883			29,478 27		182,993 64	212,471 91	116,695 00		95,776 91
Do	1884	22	458		3,475,000 00	3,810 17	3,478,810 17	3,389,255 92		89,554 25
Do Pacific railroads	1881‡	20	390		563,666 44		563,666 44	563,666 44		
Carried forward				2,111,582 31	22,499,998 94	936'337 84	25,547,919 09	22,768,886 49	554,473 36	2,224,559 24

*And prior years.

† $3,282.68 transferred to Interior (Indian) Ledger.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes.		Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
		Vol.	Page or section.							
MILITARY ESTABLISHMENT—continued.										
Brought forward	.....	.....	.....	$2,111,582 31	$22,499,998 94	$936,337 84	$25,547,919 09	$22,768,886 49	$554,473 36	$2,224,559 24
Transportation of the Army and its supplies (Pacific Railroads)	1882†	20	390	.....	509,490 81	.....	509,490 81	509,490 81	.....	.....
Do	1883†	20	390	.....	411,550 64	.....	411,550 64	411,550 64	.....	.....
Do	1884†	20	390	.....	101,327 83	.....	101,327 83	101,327 83	.....	.....
Horses for cavalry and artillery	1882	.....	.....	4,670 64	.....	127 50	4,798 14	.....	4,798 14	.....
Do	1883	.....	.....	12,087 80	.....	2,033 66	14,121 46	9,000 00	.....	5,121 46
Do	1884	22	457	.....	200,000 00	3,119 53	203,119 53	184,620 00	.....	18,499 53
Clothing and camp and garrison equipage	1881	.....	.....	.....	.....	1,494 71	1,494 71	.....	1,494 71	.....
Do (transfer account)	1881[4]	.....	.....	.....	.....	24 89	24 89	20 39	4 50	.....
Do (transfer account)	1882	.....	.....	.....	.....	6 47	6 47	.....	6 47	.....
Do	1882	.....	.....	123,833 22	.....	1,320 48	125,153 70	.....	125,153 70	.....
Do	1883	.....	.....	34,877 98	.....	145,411 80	180,289 78	180,164 58	.....	125 20
Do	1884	22	459	.....	1,400,000 00	136,771 86	1,536,771 86	1,490 089 88	.....	46,681 98
National cemeteries	1882	.....	.....	1 00	.....	2 01	3 01	.....	3 01	.....
Do	1883	.....	.....	3,021 70	.....	2,711 47	5,733 17	4,680 79	.....	1,052 38
Do	1884	22	617	.....	100,000 00	420 00	100,420 00	88,497 98	.....	11,922 02
Pay of superintendents national cemeteries	1882	.....	.....	2,736 34	.....	.....	2,736 34	.....	2,736 34	.....
Do	1883	.....	.....	664 49	.....	61 20	725 69	.....	.....	725 69
Do	1884	22	617	.....	60,440 00	.....	60,440 00	59,944 00	.....	496 00
Headstones for graves in private cemeteries	.....	.....	.....	68,320 14	.....	.....	68,320 14	30,356 14	.....	37,964 00
Medical and hospital department (transfer account)	1881*	.....	.....	.....	.....	100 00	100 00	100 00	.....	.....
Do	1881*	.....	.....	.....	.....	220 05	220 05	.....	220 05	.....
Do	1882	.....	.....	123 69	.....	.....	123 69	123 69	.....	.....
Do	1883	.....	.....	5,993 18	.....	2,324 64	8,317 82	7,664 99	.....	652 83
Do	1884	22	459	.....	190,000 00	10,599 64	200,599 64	185,303 03	.....	15,296 61
Medical Museum and library	1884	22	459	.....	10,000 00	.....	10,000 00	10,000 00	.....	.....
Artificial limbs	1884	22	618	81,419 58	110,000 00	9,088 59	200,508 17	191,542 14	.....	8,966 03
Appliances for disabled soldiers	1882	.....	.....	2,000 00	.....	644 00	2,644 00	.....	2,644 00	.....
Do	1883	.....	.....	1,500 00	.....	173 75	1,673 75	.....	.....	1,673 75
Do	1884	22	618	.....	2,000 00	.....	2,000 00	1,016 00	.....	984 00
Construction and repair of hospitals	1881	.....	.....	.....	.....	532 89	532 89	.....	532 89	.....
Do	1882	.....	.....	2,036 36	.....	156 65	2,193 01	501 14	1,691 87	.....
Do	1883	.....	.....	32 22	.....	861 94	894 16	.....	.....	894 16
Do	1884	22	459	.....	100,000 00	.....	100,000 00	99,992 48	.....	7 52
Testing-machine	1882	.....	.....	621 76	.....	.....	621 76	.....	621 76	.....
Do	1883	.....	.....	.....	.....	3 89	3 89	.....	.....	3 89
Do	1884	22	460	.....	10,000 00	.....	10,000 00	10,000 00	.....	.....

Torpedoes for harbor defense	1884	22	471		75,000 00	20,000 00	95,000 00	95,000 00		
Machine guns	1884	22	471		20,000 00		20,000 00			20,000 00
Ordnance service	1882			72 23		1 41	73 64	81	72 83	
Do	1883			12,600 00		234 31	12,834 31	10,949 37		1,884 94
Do	1884	22	459,460		115,000 00	1,140 40	116,140 40	107,820 32		8,320 08
Ordnance, ordnance stores and supplies	1882			634 87		4 56	639 43		639 43	
Do	1883					178 27	178 27			178 27
Do	1884	22	460		400,000 00		400,000 00	400,000 00		
Powder and projectiles, proceeds of sales		21	468	42,843 67	3,084 00		45,927 67	42,808 00		3,119 67
Ordnance material, proceeds of sales		18	388	445,908 67	96,380 55		542,289 22	75,000 00		467,289 22
Manufacture or purchase of magazine guns, specific				44,000 00			44,000 00	30,250 00		13,750 00
Sea-coast batteries for instruction of militia						477 20	477 20		477 20	
Manufacture of arms at national armories	1884	22	460,614		401,000 00		401,000 00	401,000 00		
Arming and equipping the militia (transfer account)						112 30	112 30		112 30	
Arming and equipping the militia		R. S.	1,661	153,184 66	200,000 00	36,585 08	389,769 74	186,653 34		203,116 40
Powder depot, Dover, N. J		22	613		40,000 00		40,000 00	40,000 00		
Repairs of arsenals	1882			6 86			6 86		6 86	
Do	1883					26	26			26
Do	1884	22	614		40,000 00		40,000 00	40,000 00		
Springfield Arsenal, Massachusetts	1883					91 68	91 68			91 68
Do	1884	22	614		15,000 00		15,000 00	15,000 00		
Frankford Arsenal, Philadelphia, Pa	1884	22	613		1,500 00		1,500 00	1,500 00		
Rock Island Arsenal, Illinois		22	613		202,500 00		202,500 00	202,500 00		
Rock Island Bridge, Illinois	1884	22	613		9,250 00		9,250 00	9,250 00		
Benicia Arsenal, California		22	613	85,375 00	19,244 80		104,619 80	104,619 80		
New York Arsenal, New York		22	613		5,500 00		5,500 00	5,500 00		
Examination of heavy ordnance and projectiles	1882			15,169 67			15,169 67		15,169 67	
Armament of fortifications	1882			232,302 74			232,302 74		232,302 74	
Do	1883			48,490 01		451 11	48,941 12	48,809 95		131 17
Do	1884	22	471,614		402,500 00		402,500 00	239,605 73		162,894 27
Purchase of Sawyer's patent for canister shot		22	618		25,000 00		25,000 00	25,000 00		
Current and ordinary expenses, Military Academy	1882					2,183 69	2,183 69		2,183 69	
Do	1884	22	416,417		47,505 00		47,505 00	47,505 00		
Miscellaneous items and incidental expenses, Military Academy	1882			180 61			180 61		180 61	
Do	1883					113 71	113 71			113 71
Do	1884	22	418		14,370 00		14,370 00	14,370 00		
Buildings and grounds, Military Academy	1882			2 04			2 04		2 04	
Do	1883					5 76	5 76			5 76
Do	1884	22	418,419		29,350 00		29,350 00	29,350 00		
Do	1884 1885	23	9		1,010 00		1,010 00	1,010 00		
Carried forward				3,536,293 44	27,868,002 57	1,316,129 20	32,720,425 21	28,518,375 32	945,528 17	3,256,521 72

* And prior years.

† Pacific railroads.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
MILITARY ESTABLISHMENT—continued.										
Brought forward	------	------	----------	$3,536,293 44	$27,868,002 57	$1,316,129 20	$32,720,425 21	$28,518,375 32	$945,528 17	$3,256,521 72
Fort Scammel, Maine	------	------	----------	181 30	----------	----------	181 30	----------	----------	181 30
Fort Lazaretto Point, Maryland	------	------	----------	13,000 00	----------	----------	13,000 00	----------	----------	13,000 00
Fort Saint Philip, Mississippi River, Louisiana	------	------	----------	9 33	----------	----------	9 33	----------	----------	9 33
Fort Brown, Texas	------	------	----------	25,000 00	----------	----------	25,000 00	----------	----------	25,000 00
Fort Duncan, Texas	------	------	----------	10,000 00	----------	----------	10,000 00	----------	----------	10,000 00
Fort Jackson, Mississippi River, Louisiana	------	------	----------	2,527 50	----------	----------	2,527 50	2,527 50	----------	----------
Fort Pulaski, Savannah River, Georgia	------	------	----------	34 43	----------	----------	34 43	----------	----------	34 43
Ringgold Barracks	------	------	----------	9 00	----------	----------	9 00	----------	----------	9 00
Preservation and repair of fortifications	1882	------	----------	9,700 62	----------	----------	9,700 62	----------	9,700 62	----------
Do	1883	------	----------	10,230 92	----------	7,644 52	17,875 44	6,961 44	----------	10,914 00
Do	1884	22	471	----------	175,000 00	2,602 46	177,602 46	171,298 77	----------	6,303 69
Engineer depot at Willets Point, N. Y	1884	22	459	----------	7,000 00	7,000 00	14,000 00	14,000 00	----------	----------
Steam launch or tug at harbor of refuge, Lake Huron, Michigan	------	------	----------	10,000 00	----------	----------	10,000 00	----------	----------	10,000 00
Improving harbor at—										
Belfast, Me	------	------	----------	3,000 00	----------	----------	3,000 00	200 00	----------	2,800 00
Portland, Me	------	------	----------	10,000 00	----------	----------	10,000 00	10,000 00	----------	----------
Portsmouth, N. H	------	------	----------	10,000 00	----------	----------	10,000 00	5,000 00	----------	5,000 00
Burlington, Vt	------	------	----------	3,000 00	----------	----------	3,000 00	3,000 00	----------	----------
Hyannis, Mass	------	------	----------	278 63	----------	----------	278 63	17 81	----------	260 82
Boston, Mass	------	------	----------	91,500 00	----------	----------	91,500 00	66,116 70	----------	25,383 30
Nantucket, Mass	------	------	----------	25,172 10	----------	----------	25,172 10	20,172 10	----------	5,000 00
Newburyport, Mass	------	------	----------	35,000 00	----------	----------	35,000 00	35,000 00	----------	----------
Lynn, Mass	------	------	----------	58,181 12	----------	----------	58,181 12	3,181 12	----------	55,000 00
Provincetown, Mass	------	------	----------	22 93	----------	----------	22 93	22 93	----------	----------
Plymouth, Mass	------	------	----------	956 71	----------	----------	956 71	956 71	----------	----------
Scituate, Mass	------	------	----------	1,672 28	----------	----------	1,672 28	1,672 28	----------	----------
Wareham, Mass	------	------	----------	2,379 32	----------	----------	2,379 32	2,379 32	----------	----------
Of refuge, Wood's Holl, Mass	------	------	----------	40,000 00	----------	----------	40,000 00	40,000 00	----------	----------
At Newport, R. I	------	------	----------	14,305 50	----------	----------	14,305 50	14,305 50	----------	----------
Block Island, R. I	------	------	----------	----------	----------	163 20	163 20	163 20	----------	----------
New Haven, Conn	------	------	----------	15,000 00	----------	----------	15,000 00	15,000 00	----------	----------
Improving breakwater, New Haven, Conn	------	------	----------	35,000 00	----------	----------	35,000 00	35,000 00	----------	----------
Improving harbor, Buffalo, N. Y	------	------	----------	125,000 00	----------	----------	125,000 00	65,000 00	----------	60,000 00
Improving channel in Gowanus Bay, N. Y	------	------	----------	20,000 00	----------	----------	20,000 00	20,000 00	----------	----------
Improving harbor, Port Chester, N. Y	------	------	----------	16,950 00	----------	----------	16,950 00	1,600 00	----------	15,350 00
Improving harbor, Charlotte, N. Y	------	------	----------	32,000 00	----------	----------	32,000 00	30,000 00	----------	2,000 00

Improving Echo Harbor, New Rochelle, N. Y				3,000 00			3,000 00			3,000 00
Improving harbor at—										
Greenport, N. Y				5,000 00			5,000 00	5,000 00		
Great Sodus Bay, N. Y				20,000 00			20,000 00	17,000 00		3,000 00
Little Sodus Bay, N. Y				20,000 00			20,000 00	17,000 00		3,000 00
Mamaroneck, N. Y				14,000 00			14,000 00	14,000 00		
New Rochelle, N. Y				15,000 00			15,000 00			15,000 00
Ogdensburg, N. Y				8,000 00			8,000 00	8,000 00		
Oswego, N. Y				60,000 00			60,000 00	40,158 40		19,841 60
Oak Orchard, N. Y				3,000 00			3,000 00			3,000 00
Paltneyville, N. Y				3,000 00			3,000 00	3,000 00		
Sheepshead Bay				9,000 00			9,000 00	9,000 00		
Improving Sackett's Harbor, New York				5,969 50			5,969 50	5,969 50		
Improving harbor at—										
Wilson, N. Y				8,000 00			8,000 00	8,000 00		
Plattsburg, N. Y						115 20	115 20	115 20		
Erie, Pa				15,000 00			15,000 00	3,500 00		11,500 00
Marcus Hook, Pa				38,000 00		6,290 18	44,290 18	24,290 18		20,000 00
Keyport, N. J				30,141 45			30,141 45	30,141 45		
Raritan Bay, New Jersey				40,000 00			40,000 00	40,000 00		
Removing obstructions from harbor at Delaware Breakwater, Delaware						4,975 24	4,975 24	4,975 24		
Improving harbor at Delaware Breakwater, Delaware				90,000 00		12,974 12	102,974 12	102,974 12		
Constructing pier in Delaware Bay, near Lewes, Del				4,000 00		2,154 38	6,154 38	6,154 38		
Ice-harbor at Reedy Island, Delaware				18,000 00		705 82	18,705 82	1,205 82		17,500 00
Improving harbor at—										
Wilmington, Del				27,000 00		2,752 61	29,752 61	28,752 61		1,000 00
Baltimore, Md				350,000 00			350,000 00	295,000 00		55,000 00
Annapolis, Md				9,205 98			9,205 98			9,205 98
Cambridge, Md				187 70			187 70	187 70		
Cambridge and Pocomoke River, Maryland				2,500 00			2,500 00	2,500 00		
Washington and Georgetown, D. C				22,226 73			22,226 73			22,226 73
Norfolk, Va				39,934 83		65 17	40,000 00	40,000 00		
Beaufort, N C				15,000 00			15,000 00			15,000 00
Charleston, S. C				102,043 03		24 00	102,067 03	102,067 03		
Georgetown, S. C				7,000 00			7,000 00			7,000 00
Savannah, Ga				79,521 88			79,521 88	79,521 88		
Key West, Fla				25,000 00			25,000 00	25,000 00		
Pensacola, Fla				65,000 00			65,000 00	65,000 00		
Mobile, Ala				85,000 00			85,000 00	85,000 00		
New Orleans, La				122,010 00		12,826 25	134,836 25	58,000 00		76,836 25
Brazos Saniago, Tex				60,000 00			60,000 00	60,000 00		
Galveston, Tex				41,000 00			41,000 00	41,000 00		
Ashtabula, Ohio				15,000 00			15,000 00	15,000 00		
Cleveland, Chio				224,997 00			224,997 00	212,000 00		12,997 00
Carrried forward				5,858,143 23	28,050,002 57	1,376,422 35	35,284,568 15	30,531,464 21	955,228 79	3,797,875 15

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
MILITARY ESTABLISHMENT—continued.										
Brought forward	.....	.....	.....	$5,858,143 23	$28,050,002 57	$1,376,422 35	$35,284,568 15	$30,891,464 21	$955,228 79	$3,797,875 15
Improving harbor of refuge near Cincinnati, Ohio	.....	.....	.....	16,000 00	.....	.....	16,000 00	400 00	.....	15,600 00
Improving harbor at—										
Black River, Ohio	.....	.....	.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Fairport, Ohio	.....	.....	.....	2,500 00	.....	.....	2,500 00	2,200 00	.....	300 00
Improving ice harbor, mouth of Muskingum River, Ohio	.....	.....	.....	5,000 00	.....	.....	5,000 00	.....	.....	5,000 00
Improving harbor at—										
Sandusky City, Ohio	.....	.....	.....	500 00	.....	.....	500 00	.....	.....	500 00
Toledo, Ohio	.....	.....	.....	24,000 00	.....	.....	24,000 00	17,000 00	.....	7,000 00
Vermillion, Ohio	.....	.....	.....	2,000 00	.....	.....	2,000 00	2,000 00	.....	.....
Michigan City, Ind	.....	.....	.....	18,000 00	.....	.....	18,000 00	18,000 00	.....	.....
Rock Island, Ill	.....	.....	.....	6,000 00	.....	.....	6,000 00	.....	.....	6,000 00
Chicago, Ill	.....	.....	.....	75,000 00	.....	.....	75,000 00	75,000 00	.....	.....
Calumet, Ill	.....	.....	.....	10,000 00	.....	.....	10,000 00	10,000 00	.....	.....
Waukegan, Ill	.....	.....	.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Cheboygan, Mich	.....	.....	.....	.....	.....	121 02	121 02	121 02	.....	.....
Au Sable, Mich	.....	.....	.....	2,000 00	.....	2,900 55	4,900 55	.....	.....	4,900 55
Mouth of Cedar River, Michigan	.....	.....	.....	14,000 00	.....	.....	14,000 00	14,000 00	.....	.....
Charlevoix, Mich	.....	.....	.....	1,000 00	.....	.....	1,000 00	1,000 00	.....	.....
Frankfort, Mich	.....	.....	.....	2,000 00	.....	.....	2,000 00	2,000 00	.....	.....
Grand Haven, Mich	.....	.....	.....	8,154 80	.....	1,845 20	10,000 00	10,000 00	.....	.....
Improving harbor of refuge, Lake Huron, Michigan	.....	.....	.....	40,000 00	.....	11,381 58	51,381 58	51,381 58	.....	.....
Improving harbor at—										
Ludington, Mich	.....	.....	.....	3,000 00	.....	.....	3,000 00	3,000 00	.....	.....
Manistee, Mich	.....	.....	.....	2,000 00	.....	.....	2,000 00	2,000 00	.....	.....
Marquette, Mich	.....	.....	.....	9,000 00	.....	.....	9,000 00	3,000 00	.....	6,000 00
Muskegon, Mich	.....	.....	.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
New Buffalo, Mich	.....	.....	.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Ontonagon, Mich	.....	.....	.....	15,000 00	.....	.....	15,000 00	15,000 00	.....	.....
Pentwater, Mich	.....	.....	.....	3,000 00	.....	.....	3,000 00	3,000 00	.....	.....
Improving Portage Lake harbor of refuge, Michigan	.....	.....	.....	10,000 00	.....	.....	10,000 00	10,000 00	.....	.....
Improving harbor of refuge, Grand Marais, Mich	.....	.....	.....	61,500 00	.....	.....	61,500 00	57,500 00	.....	4,000 00

Improving harbor at—											
Saint Joseph, Mich				5,000 00			5,000 00				5,000 00
Saugatuck, Mich				6,000 00			6,000 00	6,000 00			
South Haven, Mich				3,000 00			3,000 00	3,000 00			
Thunder Bay, Mich				9,000 00		3,144 78	12,144 78	10,000 00			2,144 78
White River, Mich				4,000 00			4,000 00	4,000 00			
Manistique, Mich				2,000 00			2,000 00				2,000 00
Improving Eagle Harbor, Michigan				3,500 00			3,500 00				3,500 00
Improving ice harbor of refuge at Belle River, Mich						120 76	120 76	120 76			
Improving harbor at—											
Green Bay, Wis				13,000 00			13,000 00	13,000 00			
Kewaunee, Wis				7,000 00			7,000 00	7,000 00			
Manitowoc, Wis				1,000 00			1,000 00	1,000 00			
Menomonee, Wis				13,000 00			13,000 00	13,000 00			
Milwaukee, Wis				10,000 00			10,000 00				10,000 00
Oconto, Wis				17,000 00			17,000 00	17,000 00			
Pensaukee, Wis				9,000 00			9,000 00	9,000 00			
Port Washington, Wis				1,000 00			1,000 00	1,000 00			
Improving harbor of refuge, Lake Pepin, Wisconsin and Minnesota				20,000 00			20,000 00				20,000 00
Improving harbor of refuge, Milwaukee, Wis				50,000 00			50,000 00	50,000 00			
Improving harbor at—											
Racine, Wis				6,000 00			6,000 00	6,000 00			
Sheboygan, Wis				22,000 00			22,000 00	22,000 00			
Two Rivers, Wis				8,000 00			8,000 00	8,000 00			
Dredging Superior Bay, Wisconsin				20,000 00			20,000 00	20,000 00			
Improving harbor of refuge at entrance of Sturgeon Bay Canal, Wisconsin				10,000 00			10,000 00	10 000 00			
Improving harbor at—											
Muscatine, Iowa				2,500 00			2,500 00	2,500 00			
Grand Marais, Minn				18,000 00			18,000 00	18,000 00			
Duluth Minn				15,000 00			15,000 00	15,000 00			
San Francisco, Cal				3,828 57			3,828 57				3,828 57
Oakland, Cal				182,000 00			182,000 00	145,000 00			37,000 00
Improving Humboldt Harbor and Bay, California				15,000 00			15,000 00	15,000 00			
Improving harbor at—											
Wilmington, Cal				30,000 00			30,000 00	30,000 00			
Yaquina Bay, Oreg				16,000 00			16,000 00	16,000 00			
Improving Royal River, Maine				4,949 40			4,949 40	4,949 40			
Improving Lubec Channel, Maine				12,000 00			12,000 00	5,000 00			7,000 00
Improving Moosabec Bar at Jonesport, Me				5,000 00			5,000 00	5,000 00			
Improving Cocheco River, New Hampshire				18,000 00			18,000 00	18,000 00			
Improving Otter Creek, Vermont				2,000 00			2,000 00				2,000 00
Improving Malden River, Massachusetts				4,000 00			4,000 00	4,000 00			
Improving Merrimac River, Massachusetts				2,000,00			2,000 00	2,000 00			
Improving Taunton River, Massachusetts						144 00	144 00	144 00			
Carried forward				6,777,576 00	28,050,002 57	1,396,080 24	36,223,658 81	31,328,780 97	955,228 79		3,939,649 05

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
MILITARY ESTABLISHMENT—continued.										
Brought forward	.....	.....	.....	$6,777,576 00	$28,050,002 57	$1,396,080 24	$36,223,658 81	$31,328,780 97	$955,228 79	$3,939,649 05
Improving Providence River and Narragansett Bay, Rhode Island	.....	.....	.....	107,026 25	.....	88 80	107,115 05	107,115 05	.....	.....
Improving Pawtucket River, Rhode Island	.....	.....	.....	529 58	.....	.....	529 58	88 80	.....	440 78
Improving Connecticut River, Connecticut	.....	.....	.....	44,560 15	.....	.....	44,560 15	28,305 97	.....	16,254 18
Improving Thames River, Connecticut	.....	.....	.....	20,000 00	.....	.....	20,000 00	20,000 00	.....	.....
Improving Connecticut River between Hartford and Holyoke, Conn	.....	.....	.....	10,000 00	.....	.....	10,000 00	.....	.....	10,000 00
Removing obstructions in East River and Hell Gate, New York	.....	.....	.....	30,000 00	.....	.....	30,000 00	22,000 00	.....	8,000 00
Improving Grass River at Massena, N. Y	.....	.....	.....	2,500 00	.....	.....	2,500 00	.....	.....	2,500 00
Improving Hudson River, New York	.....	.....	.....	45,000 00	.....	.....	45,000 00	37,000 00	.....	8,000 00
Improving Newtown Creek, New York	.....	.....	.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Improving Niagara River, New York	.....	.....	.....	1,500 00	.....	.....	1,500 00	1,000 00	.....	500 00
Improving Buttermilk Channel, New York	.....	.....	.....	50,000 00	.....	.....	50,000 00	50,000 00	.....	.....
Improving Harlem River, New York	.....	.....	.....	400,000 00	.....	.....	400,000 00	.....	.....	400,000 00
Improving East Chester Creek, New York	.....	.....	.....	7,000 00	.....	.....	7,000 00	7,000 00	.....	.....
Improving Cohansey Creek, New Jersey	.....	.....	.....	.....	.....	515 67	515 67	515 67	.....	.....
Improving Cheesequakes Creek, New Jersey	.....	.....	.....	14,000 00	.....	.....	14,000 00	14,000 00	.....	.....
Improving Elizabeth River, New Jersey	.....	.....	.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Improving Manasquan River, New Jersey	.....	.....	.....	1,000 00	.....	.....	1,000 00	.....	.....	1,000 00
Improving Mantua Creek, New Jersey	.....	.....	.....	3,000 00	.....	.....	3,000 00	.....	.....	3,000 00
Improving Maurice River, New Jersey	.....	.....	.....	3,000 00	.....	.....	3,000 00	.....	.....	3,000 00
Improving Passaic River, New Jersey	.....	.....	.....	8,932 62	.....	.....	8,932 62	8,932 62	.....	.....
Improving Passaic River from Pennsylvania Railroad bridge to mouth, New Jersey	.....	.....	.....	28,000 00	.....	.....	28,000 00	28,000 00	.....	.....
Improving Rahway River, New Jersey	.....	.....	.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Improving Salem River, New Jersey	.....	.....	.....	.....	.....	1,490 66	1,490 66	.....	.....	1,490 66
Improving Raritan River, New Jersey	.....	.....	.....	15,000 00	.....	.....	15,000 00	15,000 00	.....	.....
Improving Raccoon River, New Jersey	.....	.....	.....	2,250 00	.....	.....	2,250 00	7 23	.....	2,242 77
Improving Shrewsbury River, New Jersey	.....	.....	.....	15,000 00	.....	.....	15,000 00	15,000 00	.....	.....
Improving Rancocas River, New Jersey	.....	.....	.....	.....	.....	471 00	471 00	471 00	.....	.....
Improving Woodbury Creek, New Jersey	.....	.....	.....	4,500 00	.....	49 69	4,549 69	.....	.....	4,549 69
Improving Delaware River below Bridesburg, Pa	.....	.....	.....	84,000 00	.....	7,445 89	91,445 89	91,445 89	.....	.....
Improving Delaware River between Trenton, N. J., and Bridesburg, Pa	.....	.....	.....	.....	.....	232 77	232 77	232 77	.....	.....

Improving Delaware River at Schooner Ledge, Pennsylvania and Delaware						1,000 52	1,000 52	1,000 52		
Improving Delaware River near Cherry Island Flats, Pennsylvania and Delaware				65,000 00		2,821 58	67,821 58	66,000 00		1,821 58
Improving Frankford Creek, Pennsylvania				3,000 00		1,116 72	4,116 72	3,500 00		616 72
Improving North Branch of Susquehanna River, Pennsylvania				5,000 00		226 48	5,226 48	5,226 48		
Improving Schuylkill River, Pennsylvania				35,000 00		4,412 87	39,412 87	36,500 00		2,912 87
Improving Broadkiln River, Delaware				13,900 00		77 58	13,977 58			13,977 58
Improving Indian River, Delaware				7,000 00		300 00	7,300 00	7,300 00		
Improving Saint Jones River, Delaware				4,500 00		382 10	4,882 10			4,882 10
Improving Corsica Creek, Maryland				5,000 00			5,000 00	5,000 00		
Improving Chester River, Maryland				2,500 00			2,500 00			2,500 00
Improving Elk River, Maryland				4,000 00			4,000 00	4,000 00		
Improving water passage between Deal's Island and the mainland, Maryland				4,500 00			4,500 00			4,500 00
Improving Wicomico River, Maryland				1,000 00			1,000 00	1,000 00		
Improving Potomac River, District of Columbia				315,000 00			315,000 00	283,000 00		32,000 00
Improving Blackwater River, Virginia				1,509 64			1,509 64	1,509 64		
Improving Appomattox River, Virginia				15,000 00			15,000 00	15,000 00		
Improving Archer's Hope River, Virginia				5,000 00			5,000 00	5,000 00		
Improving James River, Virginia				70,000 00			70,000 00	55,000 00		15,000 00
Improving Nomini Creek, Virginia				2,000 00			2,000 00	2,000 00		
Improving North Landing River, Virginia and North Carolina				8,000 00			8,000 00	2,500 00		5,500 00
Improving New River, Virginia and West Virginia				4,000 00			4,000 00	1,000 00		3,000 00
Improving Pamunkey River, Virginia				2,000 00			2,000 00			2,000 00
Improving Monongahela River, West Virginia				15,000 00			15,000 00	11,000 00		4,000 00
Improving Staunton River, Virginia				4,000 00			4,000 00	4,000 00		
Improving Totuskey River, Virginia				1,500 00			1,500 00	1,500 00		
Improving Pagan Creek, Virginia				55 53			55 53	55 53		
Improving Monongahela River, West Virginia and Pennsylvania				10,000 00			10,000 00	10,000 00		
Improving Elk River, West Virginia				2,000 00			2,000 00	2,000 00		
Improving Shenandoah River, West Virginia				17,312 20			17,312 20	500 00		16,812 20
Improving Guyandotte River, West Virginia				1,400 00			1,400 00	1,400 00		
Improving Great Kanawha River, West Virginia				160,000 00			160,000 00	50,000 00		110,000 00
Improving Little Kanawha River, West Virginia				31,000 00		2,131 39	33,131 39			33,131 39
Improving Cape Fear River from ocean to Wilmington, N. C				145,000 00			145,000 00	130,000 00		15,000 00
Improving Cape Fear River from Wilmington to Fayetteville, N. C				30,000 00			30,000 00	13,500 00		16,500 00
Improving French Broad River, North Carolina				2,000 00			2,000 00	2,000 00		
Carried forward				8,681,551 97	28,050,002 57	1,418,843 96	38,150,398 50	32,510,388 14	955,228 79	4,684,781 57

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
MILITARY ESTABLISHMENT—continued.										
Brought forward	.....	.....	.....	$8,681,551 97	$28,050,002 57	$1,418,843 96	$38,150,398 50	$32,510,388 14	$955,228 79	$4,684,781 57
Improving Meherrin River, North Carolina	.....	.....	.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Improving Neuse River, North Carolina	.....	.....	.....	20,000 00	.....	.....	20,000 00	11,000 00	.....	9,000 00
Improving New River, North Carolina	.....	.....	.....	5,000 00	.....	.....	5,000 00	.....	.....	5,000 00
Improving Pamlico and Tar Rivers, North Carolina	.....	.....	.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Improving Roanoke River, North Carolina	.....	.....	.....	2,000 00	.....	.....	2,000 00	2,000 00	.....	.....
Improving Trent River, North Carolina	.....	.....	.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Improving Yadkin River, North Carolina	.....	.....	.....	31,000 00	.....	.....	31,000 00	8,500 00	.....	22,500 00
Improving Santee River, South Carolina	.....	.....	.....	40,000 00	.....	.....	40,000 00	25,000 00	.....	15,000 00
Improving Salkahatchie River, South Carolina	.....	.....	.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Improving Wateree River, South Carolina	.....	.....	.....	10,000 00	.....	.....	10,000 00	10,000 00	.....	.....
Improving Altamaha River, South Carolina	.....	.....	.....	14,000 00	.....	.....	14,000 00	14,000 00	.....	.....
Improving Chattahoochee River, Georgia	.....	.....	.....	15,000 00	.....	.....	15,000 00	15,000 00	.....	.....
Improving Coosa River, Georgia and Alabama	.....	.....	.....	41,300 00	.....	.....	41,300 00	23,000 00	.....	18,300 00
Improving Flint River, Georgia	.....	.....	.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Improving Ocmulgee River, Georgia	.....	.....	.....	1,000 00	.....	.....	1,000 00	1,000 00	.....	.....
Improving Oconee River, Georgia	.....	.....	.....	3,500 00	.....	.....	3,500 00	3,500 00	.....	.....
Improving Oostenaula and Coosawattee Rivers, Georgia	.....	.....	.....	1,000 00	.....	.....	1,000 00	.....	.....	1,000 00
Improving Romley Marsh, Georgia	.....	.....	.....	9,938 37	.....	.....	9,938 37	9,938 37	.....	.....
Improving Etowa River, Georgia	.....	.....	.....	8,700 00	.....	.....	8,700 00	.....	.....	8,700 00
Improving Saint Augustine Creek, Georgia	.....	.....	.....	3,417 66	.....	.....	3,417 66	.....	.....	3,417 66
Improving Apalachicola River, Florida	.....	.....	.....	2,000 00	.....	.....	2,000 00	2,000 00	.....	.....
Improving Choctawhatchie River, Florida	.....	.....	.....	2,000 00	.....	.....	2,000 00	2,000 00	.....	.....
Improving Caloosahatchee River, Florida	.....	.....	.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Improving Escambia and Conecuh Rivers, Florida and Alabama	.....	.....	.....	6,000 00	.....	.....	6,000 00	6,000 00	.....	.....
Improving Peas Creek, Florida	.....	.....	.....	4,000 00	.....	.....	4,000 00	4,000 00	.....	.....
Improving Saint John's River, Florida	.....	.....	.....	65,000 00	.....	.....	65,000 00	65,000 00	.....	.....
Improving inside passage between Fernandina and Saint John's, Florida	.....	.....	.....	4,000 00	.....	.....	4,000 00	.....	.....	4,000 00
Improving Alabama River, Alabama	.....	.....	.....	10,000 00	.....	.....	10,000 00	10,000 00	.....	.....
Improving Cahaba River, Alabama	.....	.....	.....	10,000 00	.....	.....	10,000 00	10,000 00	.....	.....
Improving Tallapoosa River, Alabama	.....	.....	.....	15,000 00	.....	.....	15,000 00	15,000 00	.....	.....
Improving Old Town Creek, Mississippi	.....	.....	.....	3,000 00	.....	.....	3,000 00	3,000 00	.....	.....

Improving Pearl River, Mississippi				12,500 00			12,500 00	6,000 00	6,500 00
Improving Pearl River below Jackson, Miss.				10,000 00			10,000 00	7,000 00	3,000 00
Improving roadstead into back bay of Biloxi, Mississippi				4,988 55			4,988 55		4,988 55
Improving Tombigbee River, Mississippi				1,000 00			1,000 00	1,000 00	
Improving Bayou Black, Louisiana				13,500 00			13,500 00	10,500 00	3,000 00
Improving Calcasieu Pass, Louisiana				3,000 00			3,000 00	200 00	2,800 00
Improving Calcasieu River, Louisiana				10,000 00			10,000 00	500 00	9,500 00
Improving Red River, Louisiana				40,000 00			40,000 00	40,000 00	
Improving Tchefuncta River, Louisiana				2,500 00			2,500 00	2,500 00	
Improving Tickfaw River, Louisiana				2,000 00			2,000 00	2,000 00	
Improving Bayou La Fourche, Louisiana				3,000 00			3,000 00	3,000 00	
Improving Bayou Courtableau, Louisiana				3,000 00			3,000 00	1,000 00	2,000 00
Improving Bayou Teche, Louisiana				16,000 00			16,000 00	1,800 00	14,200 00
Improving Tangipahoa River, Louisiana				2,000 00			2,000 00	2,000 00	
Improving Amite River, Louisiana				5,000 00			5,000 00	5,000 00	
Improving mouth of Mississippi River, Louisiana				50 00			50 00		50 00
Connecting Bayou Teche with Grand Lake Charenton, Louisiana				24,200 00			24,200 00	2,000 00	22,200 00
Improving mouth of Red River, Louisiana				55,500 00		571 26	56,071 26	43,000 00	13,071 26
Improving Aransas Pass and Bay, Texas				15,000 00			15,000 00	15,000 00	
Improving Buffalo Bayou, Texas				25,000 00			25,000 00	25,000 00	
Improving mouth of Brazos River, Texas				15,000 00			15,000 00	15,000 00	
Improving Neches River, Texas				5,000 00			5,000 00		5,000 00
Improving Pass Cavello, Texas				60,000 00			60,000 00	60,000 00	
Improving ship channel in Galveston Bay, Texas				144,500 00			144,500 00		144,500 00
Protection of river bank at Fort Brown, Texas				1,000 00			1,000 00		1,000 00
Improving Sabine River, Texas				4,000 00			4,000 00		4,000 00
Improving Trinity River, Texas				13,000 00			13,000 00		13,000 00
Improving Arkansas River, Arkansas and Kansas				20,000 00			20,000 00	16,000 00	4,000 00
Improving Black River, Arkansas and Missouri				4,000 00			4,000 00	4,000 00	
Improving Saline River, Arkansas				2,000 00			2,000 00	2,000 00	
Improving White River above Buffalo Shoals, Arkansas				3,000 00			3,000 00	3,000 00	
Improving White River between Buffalo Shoals and Jacksonport, Arkansas				2,000 00			2,000 00		2,000 00
Improving White and Saint Francis Rivers, Arkansas				2,000 00			2,000 00	2,000,00	
Improving L'Anguille River, Arkansas				1,500 00			1,500 00		1,500 00
Improving Sabine Pass, Texas				120,087 00			120,087 00	120,087 00	
Improving Caney Fork River, Tennessee				4,000 00			4,000 00	4,000 00	
Improving Clinch River, Tennessee				1,500 00			1,500 00	1,500 00	
Carried forward				9,689,233 55	28,050,002 57	1,419,415 22	39,158,651 34	33,175,413 51	955,228 79	5,028,009 04

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes.		Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
		Vol.	Page or section.							
MILITARY ESTABLISHMENT—continued.										
Brought forward				$9,689,233 55	$28,050,002 57	$1,419,415 22	$39,158,651 34	$33,175,413 51	$955,228 79	$5,028,009 04
Improving Cumberland River above Nashville, Tenn				9,000 00			9,000 00	9,000 00		
Improving Cumberland River below Nashville, Tenn				2,000 00			2,000 00	2,000 00		
Improving Little Tennessee River, Tennessee				3,500 00			3,500 00	3,500 00		
Improving Obeys River, Tennessee				5,000 00			5,000 00	5,000 00		
Improving Tennessee River below Chattanooga, Tennessee and Alabama				25,000 00		50 40	25,050 40	25,050 40		
Improving Big Sandy River, Kentucky				103,558 92			103,558 92	31,546 71		72,012 21
Improving Cumberland River above mouth of Jelico, Kentucky				5,000 00			5,000 00			5,000 00
Improving Kentucky River, Kentucky				112,670 38			112,670 38	40,584 68		72,085 70
Improving South Fork of Cumberland River, Kentucky				998 98			998 98			998 98
Improving Tradewater River, Kentucky				3,500 00			3,500 00	3,500 00		
Improving Ohio River				95,000 00			95,000 00	75,827 46		19,172 54
Improving Sandusky River, Ohio				400 00			400 00			400 00
Improving Rocky River, Ohio				1,390 00			1,390 00	1,390 00		
Improving White River, Indiana				5,000 00			5,000 00	5,000 00		
Improving Wabash River, Indiana and Illinois				20,000 00			20,000 00	20,000 00		
Improving Illinois River, Illinois				270,000 00			270,000 00	200,000 00		70,000 00
Improving Mississippi River		23	1	1,353,000 00	1,000,000 00	20 00	2,353,020 00	1,946,557 49		406,462 51
Improving Upper Mississippi River				4,000 00			4,000 00	4,000 00		
Reservoirs at headwaters Mississippi River				286,984 40			286,984 40	225,343 30		61,641 10
Dry dock at Des Moines Rapids Canal, Mississippi River				18,000 00			18,000 00	18,000 00		
Improving Mississippi River above Falls of Saint Anthony, Minnesota				4,000 00			4,000 00	4,000 00		
Improving Mississippi River from Saint Paul to Des Moines Rapids, Minnesota, Iowa, Wisconsin, Illinois, and Missouri				85,000 00			85,000 00	70,000 00		15,000 00
Improving Des Moines Rapids, Mississippi River, Iowa, and Illinois				11,500 00			11,500 00	11,500 00		
Improving Mississippi, Missouri, and Arkansas Rivers				129,000 00			129,000 00	48,000 00		81,000 00
Improving Mississippi River at Quincy, Ill				7,000 00			7,000 00	7,000 00		

Removing bar in Mississippi River opposite Dubuque, Iowa				5,000 00			5,000 00			5,000 00
Improving Rock Island Rapids, Mississippi River, Missouri and Illinois				2,000 00			2,000 00	2,000 00		
Improving Mississippi River opposite Saint Louis				20,000 00			20,000 00	20,000 00		
Improving Missouri River from its mouth to Sioux City, Iowa				240,000 00			240,000 00	220,000 00		20,000 00
Improving Missouri River from Sioux City, Iowa, to Fort Benton, Mont				52,700 00			52,700 00	43,000 00		9,700 00
Survey of Missouri River from its mouth to Fort Benton, Mont				12,000 00			12,000 00	2,500 00		9,500 00
Improving Gasconade River, Missouri				500 00			500 00	500 00		
Improving Clinton River, Michigan						585 41	585 41	585 41		
Improving Detroit River, Michigan						12,664 06	12,664 06	12,664 06		
Improving Grand River, Michigan				8,000 00			8,000 00	8,000 00		
Improving Hay Lake Channel, Sault Sainte Marie River, Michigan				165,000 00		24,586 00	189,586 00	125,000 00		64,586 00
Improving Saginaw River, Michigan				104,000 00		18,402 28	122,402 28	122,402 28		
Improving Chippewa River at Yellow Bank, Wis				17,000 00			17,000 00	17,000 00		
Improving Fox and Wisconsin Rivers, Wisconsin				85,000 00			85,000 00	50,000 00		35,000 00
Constructing dam at Goose Rapids, Red River of the North, Minnesota and Dakota				49,400 00			49,400 00	2,500 00		46,900 00
Improving Red River of the North, Minnesota and Dakota				4,000 00			4,000 00	4,000 00		
Improving Saint Croix River below Taylor's Falls, Minnesota and Wisconsin				8,000 00			8,000 00	8,000 00		
Improving Yellowstone River, Montana and Dakota				2,600 00			2,600 00	2,600 00		
Improving Lower Clearwater River, Idaho				3,000 00			3,000 00	3,000 00		
Improving Sacramento and Feather Rivers, California				225,000 00			225,000 00	15,000 00		210,000 00
Improving San Joaquin River, California				20,000 00			20,000 00	20,000 00		
Improving Petaluma Creek, California				2,000 00			2,000 00	2,000 00		
Improving Umpqua River, California				4,685 89			4,685 89			4,685 89
Breakwater and Harbor of Refuge between Straits of Fuca, San Francisco, Cal				139,742 89		1,630 19	141,373 08			141,373 08
Constructing canal around Cascades of Columbia River, Oregon				50,000 00			50,000 00	50,000 00		
Improving Upper Columbia River, Oregon				4,000 00			4,000 00	4,000 00		
Improving Lower Willamette and Columbia Rivers, Oregon				5,000 00			5,000 00	5,000 00		
Improving Chehalis River, Washington Territory				1,000 00			1,000 00	1,000 00		
Carried forward				13,479,365 01	29,050,002 57	1,477,353 56	44,006,721 14	36,672,965 30	955,228 79	6,378,527 05

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
MILITARY ESTABLISHMENT—continued.										
Brought forward	.....	.....	.....	$13,479,365 01	$29,050,002 57	$1,477,353 56	$44,006,721 14	$36,672,965 30	$955,228 79	$6,378,527 05
Improving Skagit, Steilaquamish, Nootsack, Snohomish, and Snoqualmie Rivers, Washington Territory	.....	.....	.....	6,500 00	.....	.....	6,500 00	6,500 00	.....	.....
Testing flume invented by M. J. Adams	.....	.....	.....	4,000 00	.....	.....	4,000 00	4,000 00	.....	.....
Examination and surveys at South Pass Mississippi River	.....	23	4	5,859 67	6,000 00	.....	11,859 67	9,359 67	.....	2,500 00
Constructing lock and dam on Mississippi River at Meeker's Falls, Minnesota	.....	.....	.....	25,000 00	.....	.....	25,000 00	.....	.....	25,000 00
Gauging the waters of the Lower Mississippi River and its tributaries	.....	23	4	.....	2,100 00	.....	2,100 00	2,100 00	.....	.....
Sea-wall, Governor's Island, New York	.....	.....	.....	33,000 00	.....	.....	33,000 00	33,000 00	.....	.....
Mississippi River Commission	.....	22	620	.....	150,000 00	.....	150,000 00	150,000 00	.....	.....
Examinations, surveys, and contingencies of rivers and harbors	.....	.....	.....	98,911 41	.....	181 02	99,092 43	78,565 38	.....	20,527 05
Operating and care Saint Mary's Falls Canal, Michigan	.....	21	478	.....	34,681 63	2,318 37	37,000 00	37,000 00	.....	.....
Improving Saint Mary's River and Saint Mary's Falls Canal, Michigan	.....	.....	.....	.....	.....	3,307 47	3,307 47	3,307 47	.....	.....
Operating and care Louisville and Portland Canal	.....	21	478	.....	47,500 00	.....	47,500 00	47,500 00	.....	.....
Operating and care Saint Clair Flats Canal, Michigan	.....	21	478	.....	3,495 49	504 51	4,000 00	4,000 00	.....	.....
Operating and care Des Moines Rapids Canal, Iowa and Illinois	.....	21	478	.....	47,000 00	.....	47,000 00	47,000 00	.....	.....
Army depot building, Saint Paul, Minn	.....	.....	.....	48,500 00	.....	.....	48,500 00	23,500 00	.....	25,000 00
Purchase of the Arlington estate, act March 3, 1883	.....	.....	.....	25,000 00	.....	.....	25,000 00	25,000 00	.....	.....
Buildings for military headquarters, Fort Snelling, Minn	.....	.....	.....	.....	.....	43	43	.....	43	.....
Buildings for military quarters, Fort Leavenworth, Kans	.....	.....	.....	.....	.....	1 05	1 05	.....	.....	1 05
Surveys of northern and northwestern lakes	1883	.....	.....	5,296 02	.....	29 76	5,325 78	3,229 76	.....	2,096 02
Do	1884	22	617	.....	3,000 00	.....	3,000 00	3,000 00	.....	.....
Survey for Hennepin Canal	.....	.....	.....	9,000 00	.....	.....	9,000 00	1,000 00	.....	8,000 00
Survey of Gettysburg battle-field	.....	.....	.....	25,000 00	.....	.....	25,000 00	8,000 00	.....	17,000 00

Geographical survey of the territory of the United States west of 100th meridian	.....	.....	.....	2,000 00	.....	30	2,000 30	2,000 00	.....	30
Constructing jetties and other works at South Pass, Mississippi River	.....	21	4	.....	150,000 00	.....	150,000 00	150,000 00	.....	.....
Removing sunken vessels or crafts obstructing or endangering navigation	.....	28	197	.....	28,857 50	.....	28,857 50	28,857 50	.....	.....
Contingencies of the Army (transfer account)	1881*	.....	.....	.....	.....	66 80	66 80	66 80	.....	.....
Do	1882	.....	.....	10,501 03	.....	.....	10,501 03	.....	10,501 03	.....
Do	1883	.....	.....	18,203 83	.....	105 66	18,309 49	3,254 00	.....	15,055 49
Do	1884	22	459	.....	40,000 00	105 00	40,105 00	16,255 00	.....	23,850 00
Publication of the official records of the war of the rebellion	1882	.....	.....	3 32	.....	1 00	4 32	.....	4 32	.....
Do	1883	.....	.....	27,417 51	.....	.....	27,417 51	27,417 51	.....	.....
Do	1884	22	618	.....	36,000 00	.....	36,000 00	10,000 00	.....	26,000 00
Expenses of recruiting	1881*	.....	.....	.....	.....	1,121 54	1,121 54	.....	1,121 54	.....
Do	1882	.....	.....	982 27	.....	34 10	1,016 37	4 00	1,012 37	.....
Do	1883	.....	.....	2,134 64	.....	2,855 49	4,990 13	416 25	.....	4,573 88
Do	1884	22	456	.....	110,000 00	126 34	110,126 34	99,549 49	.....	10,576 85
Expenses of Commanding General's Office	1883	.....	.....	.....	.....	161 11	161 11	.....	.....	161 11
Do	1884	22	456	.....	1,750 00	.....	1,750 00	1,750 00	.....	.....
Contingencies of the Adjutant-General's Office	1882	.....	.....	83 27	.....	1 25	84 52	.....	84 52	.....
Do	1883	.....	.....	200 00	.....	1 80	201 80	.....	.....	201 80
Do	1884	22	456	.....	2,500 00	45 40	2,545 40	2,545 40	.....	.....
Signal Service, pay	1884	22	616	.....	235,100 00	68 08	235,168 08	208,000 00	.....	27,168 08
Signal Service, subsistence	1884	22	616	.....	164,779 72	.....	164,779 72	160,004 78	.....	4,774 94
Signal Service, regular supplies	1884	22	616	.....	57,651 75	744 23	58,395 98	57,786 75	.....	609 23
Signal Service, incidental expenses	1884	22	617	.....	1,475 00	.....	1,475 00	1,475 00	.....	.....
Signal Service, transportation	1884	22	617	.....	35,275 00	.....	35,275 00	18,342 59	.....	16,932 41
Signal Service, barracks and quarters	1884	22	617	.....	85,908 00	.....	85,908 00	85,908 00	.....	.....
Signal Service, clothing and camp and garrison equipage	1884	22	617	.....	23,485 10	18 38	23,503 48	8,160 18	.....	15,343 30
Signal Service, medical department	1884	22	617	.....	5,700 00	.....	5,700 00	3,449 21	.....	2,250 79
Signal Service	1881*	.....	.....	.....	.....	165 22	165 22	.....	165 22	.....
Do	1882	.....	.....	.....	.....	120 31	120 31	.....	120 31	.....
Do	1883	.....	.....	.....	.....	2 48	2 48	.....	.....	2 48
Do	1884	22	456	.....	5,000 00	.....	5,000 00	5,000 00	.....	.....
Observation and report of storms	1881*	.....	.....	.....	.....	22,287 77	22,287 77	.....	22,287 77	.....
Do	1882	.....	.....	.....	.....	43 20	43 20	40 00	3 20	.....
Do	1883	.....	.....	.....	.....	107 50	107 50	107 50	.....	.....
Do	1884	22	615	.....	242,500 00	2 50	242,502 50	240,773 76	.....	1,728 74
Observation and exploration in the Arctic seas	.....	.....	.....	13,000 00	.....	2 50	13,002 50	13,002 50	.....	.....
Expenses of military convicts	1882	.....	.....	9,368 45	.....	.....	9,368 45	.....	9,368 45	.....
Do	1883	.....	.....	6,051 18	.....	.....	6,051 18	1,325 87	.....	4,725 31
Do	1884	22	618	.....	12,000 00	.....	12,000 00	5,892 66	.....	6,107 34
Artillery School at Fortress Monroe, Va	1882	.....	.....	1 60	.....	.....	1 60	.....	1 60	.....
Do	1884	22	618	.....	3,000 00	.....	3,000 00	3,000 00	.....	.....
Carried forward	.....	.....	.....	13,855,379 21	30,584,761 76	1,511,884 13	45,952,025 10	38,313,412 33	999,899 55	6,638,713 22

* And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
MILITARY ESTABLISHMENT—continued.										
Brought forward	.....	.....	.....	$13,855,379 21	$30,584,761 76	$1,511,884 13	$45,952,025 10	$38,313,412 33	$999,899 55	$6,638,713 22
Construction, maintenance, and repairs of military telegraph lines	1881*	.....	.....	.....	.....	11 56	11 56	.....	11 56	.....
Do	1882	.....	.....	9 50	.....	3 38	12 88	.....	12 88	.....
Do	1883	.....	.....	.....	.....	4 15	4 15	.....	.....	4 15
Do	1884	22	616	.....	35,000 00	.....	35,000 00	32,038 25	.....	2,961 75
Refunding to the State of Georgia money expended for common defense in 1877	.....	.....	.....	35,555 42	.....	.....	35,555 42	.....	.....	35,555 42
Support of National Home for Disabled Volunteer Soldiers	1884	22	619-20	.....	1,122,088 03	.....	1,122,088 03	1,122,088 03	.....	.....
Support of Soldiers' Home	.....	R. S.	3689	.....	355,439 91	65 65	355,505 56	355,505 56	.....	.....
Support of Soldiers' Home, permanent fund	.....	22	565	50,493 88	367,092 04	.....	417,585 92	126,600 00	.....	290,985 92
Support of Soldiers' Home, interest account	.....	22	565	171 35	5,298 33	.....	5,469 68	3,494 75	.....	1,974 93
Capture of Jefferson Davis	.....	.....	.....	2,382 38	.....	.....	2,382 38	.....	.....	2,382 38
Support of Military Prison at Fort Leavenworth, Kans	1882	.....	.....	1,997 45	.....	.....	1,997 45	.....	1,997 45	.....
Do	1883	.....	.....	.....	.....	64 90	64 90	.....	.....	64 90
Do	1884	22	618-19	.....	94,825 47	.....	94,825 47	93,477 15	.....	1,348 32
Extra pay to officers and men who served in the Mexican war	.....	20	316	.....	500 00	.....	500 00	500 00	.....	.....
Military posts	.....	22	615	.....	200,000 00	.....	200,000 00	200,000 00	.....	.....
Construction of a post on North Fork of Loupe River, Nebraska	1881*	.....	.....	.....	.....	3 00	3 00	.....	3 00	.....
Military posts near the Niobrara River, Nebraska and Dakota	.....	.....	.....	30	.....	.....	30	.....	30	.....
Military posts near Musselshell River, Montana	.....	.....	.....	46	.....	.....	46	.....	46	.....
Military posts for protection of Rio Grande frontier	.....	.....	.....	133,157 80	.....	56 68	133,214 48	71,476 00	.....	61,738 48
Military posts at Fort McKinney, Wyoming	.....	.....	.....	18 66	.....	.....	18 66	.....	18 66	.....
Military posts near northern boundary of Montana	.....	.....	.....	30 16	.....	.....	30 16	.....	30 16	.....
Military posts at El Paso, Tex	.....	.....	.....	30	.....	.....	30	.....	30	.....
Construction of military post on Yellowstone and Musselshell Rivers	.....	.....	.....	.....	.....	9 50	9 50	.....	9 50	.....
Bounty under act of July 28, 1866	1880*	.....	.....	60,000 00	.....	.....	60,000 00	60,000 00	.....	.....
Bounty under act of July 28, 1866, indefinite	.....	.....	.....	.....	.....	1,204 45	1,204 45	.....	1,204 45	.....
Reimbursing Missouri for militia expenses during the rebellion	.....	.....	.....	14 00	.....	.....	14 00	.....	.....	14 00

Reimbursing State and citizens of California for expenses in suppressing Modoc Indian hostilities	.....	.....	.....	614 25	.....	.....	614 25	261 01	.....	353 24
Rations for relief of persons rendered destitute by overflow of Mississippi River	.....	.....	.....	732 32	.....	.....	732 32	.....	732 32	.....
Removal of remains of Gen. George Sykes	.....	.....	.....	569 26	.....	.....	569 26	.....	569 26	.....
Claims for quartermaster stores and commissary supplies	.....	.....	.....	4,521 88	.....	125 00	4,646 88	2,730 08	.....	1,916 80
Army and Navy hospital, Hot Springs, Ark	.....	.....	.....	100,000 00	.....	.....	100,000 00	56,000 00	.....	44,000 00
Road from Chattanooga to the national cemetery, Tennessee	.....	22	617	50	2,500 00	.....	2,500 50	2,500 00	.....	50
Road from Mound City to the national cemetery, Illinois	.....	.....	.....	5,000 00	.....	.....	5,000 00	5,000 00	.....	.....
Road from Fort Scott to national cemetery, Kansas	.....	.....	.....	.....	.....	23 70	23 70	.....	.....	23 70
Services and supplies, Montana volunteers, &c	.....	.....	.....	932 00	.....	.....	932 00	.....	.....	932 00
Miscellaneous claims audited by Third Auditor	.....	.....	.....	2,269 75	.....	.....	2,269 75	.....	.....	2,269 75
Claims of loyal citizens, &c	.....	.....	.....	7,189 00	.....	100 00	7,289 00	.....	.....	7,289 00
Commutation of rations to prisoners of war in rebel prisons, prior to July 1, 1879	.....	.....	.....	398 00	.....	.....	398 00	.....	398 00	.....
Awards for quartermaster's stores, &c., taken by the Army in Tennessee	.....	.....	.....	130 00	.....	.....	130 00	.....	.....	130 00
Horses and other property lost in military service	.....	.....	.....	127 06	.....	.....	127 06	.....	.....	127 06
Relief of Kirk W. Noyes	.....	22	160	.....	514 75	.....	514 75	514 75	.....	.....
Relief of T. J. Boyles, administrator estate of M. Radish, deceased	.....	23	5	.....	440 00	.....	440 00	440 00	.....	.....
Relief of sufferers from overflow of Ohio River and its tributaries	.....	23	267, 8, 9	.....	329,500 00	33,980 64	363,480 64	361,243 60	.....	2,237 04
Relief of sufferers from overflow of Mississippi River and its tributaries	.....	.....	273	.....	170,500 00	.....	170,500 00	170,000 00	.....	500 00
Relief of Sallie A. Spence	.....	23	2	.....	100 00	.....	100 00	100 00	.....	.....
Relief of M. J. Kelly, late chaplain U. S. A., and others, of Company B, Twentieth U. S. Infantry	.....	22	52	.....	53 27	.....	53 27	53 27	.....	.....
Relief of Santiago de Leon	.....	23	8	.....	2,988 00	.....	2,988 00	2,988 00	.....	.....
Total	.....	.....	.....	14,261,694 89	33,271,601 56	1,547,536 74	49,080,833 19	40,980,422 78	1,004,887 85	7,095,522 56
NAVAL ESTABLISHMENT.										
Pay of the Navy, prior to July 1, 1879	.....	.....	.....	74 51	.....	30 87	105 38	99 95	.....	5 43
Pay of the Navy, prior to July 1, 1880	.....	.....	.....	1,408 07	.....	73 83	1,481 90	1,481 90	.....	.....
Pay of the Navy	.....	22	472–3	2,051,072 59	7,133,980 00	48,125 98	9,233,178 57	7,050,627 82	.....	2,182,550 75
Pay of the Navy, prior to July 1, 1878	.....	.....	.....	369 66	.....	.....	369 66	.....	.....	369 66
Pay, miscellaneous, prior to July 1, 1879	.....	.....	.....	244 27	.....	.....	244 27	.....	.....	244 27
Carried forward	.....	.....	.....	2,053,169 10	7,133,980 00	48,230 68	9,235,379 78	7,052,209 67	.....	2,183,170 11

*And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes.		Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amount carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
		Vol.	Page or section.							
NAVAL ESTABLISHMENT—continued.										
Brought forward	.....	.....	.....	$2,053,169 10	$7,133,980 00	$48,230 68	$9,235,379 78	$7,052,209 67	.....	$2,183,170 11
Pay, miscellaneous	1881*	.....	.....	.....	.....	11,813 77	11,813 77	.....	$11,813 77	.....
Do	1882	.....	.....	96,387 28	.....	6,349 17	102,736 45	859 50	101,876 95	.....
Do	1883	.....	.....	633 46	.....	8,300 77	8,934 23	7,993 24	.....	940 99
Do	1884	22	473	.....	300,000 00	5,108 64	305,108 64	285,092 47	.....	20,016 17
Contingent, Navy	1881*	.....	.....	.....	.....	36 00	36 00	.....	36 00	.....
Do	1882	.....	.....	213 13	.....	7 12	220 25	220 25	.....	.....
Do	1883	.....	.....	15,869 97	.....	2,760 24	18,630 21	18,558 01	.....	72 20
Do	1884	22	473	.....	100,000 00	2,923 70	102,923 70	100,753 72	.....	2,169 98
Accrued mileage, Navy and Marine Corps	.....	.....	.....	214 78	.....	8,165 24	8,380 02	8,380 02	.....	.....
Pay of Marine Corps, prior to July 1, 1878	.....	.....	.....	66 72	.....	.....	66 72	66 72	.....	.....
Pay of Marine Corps, prior to July 1, 1879	.....	.....	.....	.....	.....	23 20	23 20	.....	.....	23 20
Pay of Marine Corps	.....	22	479–80	215,668 23	642,985 00	2,380 23	861,033 46	636,092 86	.....	224,940 60
Provisions, Marine Corps	1882	.....	.....	14,584 74	.....	.....	14,584 74	28 80	14,555 94	.....
Do	1883	.....	.....	2,137 99	.....	90 22	2,228 21	2,228 21	.....	.....
Do	1384	22	480	.....	60,000 00	.....	60,000 00	59,983 59	.....	16 41
Clothing, Marine Corps	1882	.....	.....	2,153 27	.....	1,429 08	3,592 35	299 93	3,292 42	.....
Do	1883	.....	.....	44 17	.....	3,601 44	3,645 61	4 00	.....	3,641 61
Do	1884	22	480	.....	77,000 00	2,163 37	79,163 37	78,700 00	.....	463 37
Fuel, Marine Corps	1882	.....	.....	1,719 90	.....	.....	1,719 90	28 80	1,691 10	.....
Do	1883	.....	.....	1,138 69	.....	970 96	2,109 65	1,164 94	.....	944 71
Do	1884	22	480	.....	16,000 00	2,823 59	20,823 59	20,800 00	.....	23 59
Military stores, Marine Corps	1882	.....	.....	936 61	.....	.....	936 61	.....	936 61	.....
Do	1883	.....	.....	26 36	.....	310 21	336 57	.....	.....	336 57
Do	1884	22	480	.....	9,786 50	79 75	9,866 25	9,502 43	.....	363 82
Transportation and recruiting, Marine Corps	1882	.....	.....	592 52	.....	.....	592 52	242 77	349 75	.....
Do	1883	.....	.....	.....	.....	2,200 74	2,200 74	1,703 65	.....	497 09
Do	1884	22	480	.....	10,000 00	.....	10,000 00	10,000 00	.....	.....
Repairs of barracks, Marine Corps	1882	.....	.....	90	.....	.....	90	.....	90	.....
Do	1883	.....	.....	.....	.....	154 05	154 05	.....	.....	154 05
Do	1884	22	480	.....	10,000 00	.....	10,000 00	10,000 00	.....	.....
Forage for horses, Marine Corps	1882	.....	.....	1,844 28	.....	.....	1,844 28	.....	1,844 28	.....
Do	1883	.....	.....	1,400 00	.....	572 45	1,972 45	.....	.....	1,972 45
Do	1884	22	480	.....	5,400 00	.....	5,400 00	3,550 00	.....	1,850 00
Contingent, Marine Corps	1882	.....	.....	87 19	.....	.....	87 19	.....	.....	87 19
Do	1883	.....	.....	19 50	.....	880 92	900 42	227 89	.....	672 53
Do	1884	22	480	.....	25,000 00	66 12	25,066 12	25,065 80	.....	32
Marine Barracks, Washington, D. C	1882	.....	.....	9 29	.....	.....	9 29	9 29	.....	.....

Pay of professors and others, Naval Academy	1883			2,779 55			2,779 55		2,779 55	
Do	1883			306 00		14 50	320 50			320 50
Do	1884	22	478		53,559 00		53,559 00	52,581 75		977 25
Pay of watchmen and others, Naval Academy	1884	22	478		23,062 50		23,062 50	23,062 50		
Pay of mechanics and others, Naval Academy	1883					18	18			18
Do	1884	22	478		14,590 23		14,590 23	14,590 23		
Pay of steam employés, Naval Academy	1882			431 40			431 40		431 40	
Do	1883					100 85	100 85			100 85
Do	1884	22	478		7,671 00		7,671 00	7,671 00		
Repairs of Naval Academy	1884	22	478		21,000 00		21,000 00	21,000 00		
Heating and lighting Naval Academy	1884	22	478		17,000 00		17,000 00	17,000 00		
Library, Naval Academy	1884	22	478		2,000 00		2,000 00	2,000 00		
Stationery, Naval Academy	1882			02			02		02	
Do	1884	22	478		2,000 00		2,000 00	2,000 00		
Board of Visitors, Naval Academy	1883					8 25	8 25			8 25
Do	1884	22	478		1,500 00		1,500 00	1,500 00		
Chemistry, Naval Academy	1882			13 44			13 44		13 44	
Do	1884	22	478		2,500 00		2,500 00	2,500 00		
Miscellaneous, Naval Academy	1882			2 27			2 27		2 27	
Do	1884	22	478		34,600 00		34,600 00	34,600 00		
Stores, Naval Academy	1884	22	478		800 00		800 00	800 00		
Material, Naval Academy	1884	22	478		1,000 00		1,000 00	1,000 00		
Armory, Naval Academy				07			07		07	
Ocean surveys, navigation	1884	22	474		10,000 00	57	10,000 57	7,107 48		2,893 09
Navigation and navigation supplies	1882			350 15			350 15	159 31	190 84	
Do	1883			19,816 43		1,546 08	21,362 51	21,362 26		25
Do	1884	22	473		100,000 00	878 06	100,878 06	83,966 87		16,911 19
Civil establishment, navigation	1882			6 20			6 20		6 20	
Do	1883			55		1 43	1 98			1 98
Do	1884	22	474		5,000 00	23 05	5,023 05	4,979 02		44 03
Contingent, navigation	1882			290 72			290 72	13 30	277 42	
Do	1883			519 57		104 92	624 49	545 13		79 36
Do	1884	22	474		4,000 00	278 17	4,278 17	4,131 59		146 58
Hydrographic work	1881*					90	90		90	
Do	1882			2,909 71		100 20	3,009 91	2,838 00	171 91	
Do	1883			1,538 49		306 56	1,845 05	1,844 60		45
Copper plates, Hydrographic Office	1883			13,756 06		3 90	13,759 96	9,035 00		4,724 96
Survey of the west coast of Mexico, Hydrographic Office				13,828 40		573 05	14,401 45	2,853 85		11,547 60
Charts of Amazon and Madeira Rivers, Hydrographic Office				2,927 11			2,927 11			2,927 11
Charts of Pacific coast of Mexico, Hydrographic Office				9 20		2 29	11 49			11 49
Naval Observatory	1882			273 47		26	273 73		273 73	
Do	1883			564 58		9 30	573 88	570 80		3 08
Lighting vessels by electricity	1883			5,000 00			5,000 00	5,000 00		
Naval Laboratory, Washington, D.C	1882			124 99			124 99		124 99	
Do	1883			1,163 75		4 82	1,168 57	546 00		622 57
Carried forward				2,475,530 21	8,692,434 23	115,409 00	11,283,373 44	8,659,025 25	140,670 46	2,483,677 73

* And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
NAVAL ESTABLISHMENT—continued.										
Brought forward	.....	.....	.....	$2,475,530 21	$8,692,434 23	$115,409 00	$11,283,373 44	$8,659,025 25	$140,670 46	$2,483,677 73
Navy-yard Commission	.....	.....	.....	1,230 00	.....	.....	1,230 00	1,225 20	.....	4 80
Observation of the transit of Venus	.....	.....	.....	16,540 29	.....	7,823 70	24,363 99	21,813 03	.....	2,550 96
Nautical Almanac	1882	.....	.....	85 65	.....	.....	85 65	.....	85 65	.....
Velocity of light, Nautical Almanac	.....	.....	.....	1,569 70	.....	20	1,569 90	565 00	.....	1,004 90
Ordnance, ordnance stores	1882	.....	.....	30,376 09	.....	37 83	30,413 92	23,192 61	7,221 31	.....
Do	1883	.....	.....	10,605 00	.....	1,013 50	11,618 50	6,471 34	.....	5,147 16
Do	1884	22	474	.....	150,000 00	9,294 32	159,294 32	152,384 44	.....	6,909 88
Ordnance material, proceeds of sale	.....	18	388	10 00	2,799 24	.....	2,809 24	.....	.....	2,809 24
Contingent, Ordnance	1882	.....	.....	811 71	.....	.....	811 71	.....	811 71	.....
Do	1883	.....	.....	1,365 23	.....	27 42	1,392 65	890 41	.....	502 24
Do	1884	22	474	.....	3,000 00	18 32	3,018 32	3,017 72	.....	60
Civil establishment, Bureau of Ordnance	1882	.....	.....	9 05	.....	.....	9 05	.....	9 05	.....
Do	1883	.....	.....	03	.....	4 33	4 36	.....	.....	4 36
Do	1884	22	474	.....	5,000 00	8 04	5,008 04	5,003 04	.....	5 00
Repairs, Bureau of Ordnance	1883	.....	.....	5,643 36	.....	248 55	5,891 91	4,183 00	.....	1,708 91
Do	1884	22	474	.....	15,000 00	480 66	15,480 66	14,046 00	.....	1,434 66
Torpedo Corps	1882	.....	.....	8,304 88	.....	3 06	8,307 94	4,108 65	4,199 29	.....
Do	1883	.....	.....	28,124 26	.....	153 68	28,277 94	28,277 94	.....	.....
Do	1884	22	474	.....	50,000 00	3 85	50,003 85	45,693 34	.....	4,310 51
Torpedoes, Bureau of Ordnance	1884	22	475	.....	100,000 00	.....	100,000 00	.....	.....	100,000 00
Propeller for United States steamer Alarm	.....	.....	.....	607 51	.....	652 40	1,259 91	.....	.....	1,259 91
Sale of small-arms	.....	20	242	8,798 22	2,680 98	6 34	11,485 54	8,800 00	.....	2,685 54
Testing Clark's deflective turrets	.....	.....	.....	19,850 00	.....	61 50	19,911 50	10,373 00	.....	9,538 50
Steel rifled breech-loading guns	1883	.....	.....	674 10	.....	15 22	689 32	689 32	.....	.....
Do	1884	.....	.....	83,265 00	.....	5 60	83,270 60	30,689 00	.....	52,581 60
Steel cruisers	.....	.....	.....	1,291,994 00	.....	6,777 52	1,298,771 52	1,285,124 56	.....	13,646 96
Equipment of vessels	1882	.....	.....	1,485 23	.....	40	1,485 63	1,485 63	.....	.....
Do	1883	.....	.....	9,267 67	.....	3,532 35	12,800 02	11,905 85	.....	894 17
Do	1884	22	475	.....	800,000 00	6,662 61	806,662 61	799,507 02	.....	7,155 59
Transportation and recruiting, Bureau of Equipment and Recruiting	1884	22 23	475 17	.....	40,000 00	214 18	40,214 18	34,531 50	.....	5,682 68
Contingent, Bureau of Equipment and Recruiting	1879*	.....	.....	.....	.....	2 64	2 64	.....	.....	2 64
Do	1882	.....	.....	132 63	.....	.....	132 63	.....	132 63	.....
Do	1883	.....	.....	2,982 66	.....	591 30	3,573 96	3,573 56	.....	40
Do	1884	22 23	475 17	.....	15,000 00	27 31	15,027 31	14,896 76	.....	130 55

Transportation of enlisted men, Bureau of Equipment and Recruiting	1883			7,957 28		3,031 83	10,989 11	5,172 94		5,816 17
Civil establishment, Bureau of Equipment and Recruiting	1882			04			04		04	
Do	1883			9 46		46 39	55 85			55 85
Do	1884	22	475		9,000 00	7 89	9,007 89	8,891 33		116 56
Recruiting, Bureau of Equipment and Recruiting	1883			7,304 24		103 23	7,407 47	147 85		7,259 62
Tuition of two naval cadets, Royal Naval College, Greenwich				900 00			900 00	900 00		
Maintenance of Yards and Docks	1882			646 60			646 60	258 24	388 36	
Do	1883			7,627 14		129 30	7,756 44	7,451 99		304 45
Do	1883 1884			62		14 78	15 40	8 35		7 05
Do	1884	22	475		200,000 00	1,454 60	201,454 60	197,350 65		4,103 95
Contingent, Yards and Docks	1882			3 21			3 21		3 21	
Do	1883			7,882 88		1,779 52	9,662 40	9,658 00		4 40
Do	1884	22	475		20,000 00	81 43	20,081 43	11,318 66		8,762 77
Civil establishment, Yards and Docks	1882			5 84			5 84		5 84	
Do	1883			2 50		19 36	21 86			21 86
Do	1884	24	476		24,000 00	159 36	24,159 36	24,158 14		1 22
Naval station and coal depot, Isthmus of Panama				200,000 00			200,000 00			200,000 00
Naval station and coal depot, Port Royal, S. C				20,000 00			20,000 00	500 00		19,500 00
Site for naval station and coal depot, Port Royal, S.C				5,000 00			5,000 00	5,000 00		
Naval training station, Coaster's Island Harbor, R. I	1884	22	620		45,000 00	286 56	45,286 56	39,036 00		6,250 56
Do	1883			199 53			199 53	195 00		4 53
Navy-yard, Brooklyn, N. Y	1883			50,773 67		41 03	50,814 70	50,812 00		2 70
Do	1884	22	620		100,000 00	2 97	100,002 97	52,640 97		47,362 00
Navy-yard, Washington, D. C	1883			7,940 00		927 89	8,867 89	6,282 00		2,585 89
Do	1884	22	620		15,000 00		15,000 00	9,584 00		5,416 00
Navy-yard, Mare Island, Cal	1882			63			63		63	
Do	1883			45,708 97		961 43	46,670 40	46,669 50		90
Do	1884	22	620		275,000 00	7 48	275,007 48	214,933 62		60,073 86
Navy-yard, Pensacola, Fla	1881*					94 64	94 64		94 64	
Do	1882			15,141 30		1,025 58	16,166 88	721 00	15,445 88	
Navy-yard, Portsmouth, N. H	1882			07			07		07	
Navy-yard, New London, Conn	1881*					112 70	112 70		112 70	
Navy-yard, Norfolk, Va	1882			1 00			1 00		1 00	
Do	1883			1 69			1 69			1 69
Navy-yard, Boston, repairs of rope-walks	1881 1882			21 86			21 86		21 86	
Naval wharf, Key West, Fla				3,013 17		57	3,013 74	3,012 00	1 74	
Closed navy-yards and stations	1884	22	475,620		50,000 00	449 32	50,449 32	50,348 71		100 61
Naval Asylum, Philadelphia, Pa	1882			776 61			776 61		776 61	
Carried forward				4,380,180 79	10,613,914 45	163,813 69	15,157,908 93	11,916,524 12	169,982 68	3,071,402 13

*And prior years.

Statement exhibiting the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
NAVAL ESTABLISHMENT—continued.										
Brought forward	.....	.....	.....	$4,380,180 79	$10,613,914 45	$163,813 69	$15,157,908 93	$11,916,524 12	$169,982 68	$3,071,402 13
Naval Asylum, Philadelphia, Pa	1883	.....	.....	13,282 62	.....	16 89	13,299 51	12,275 00	.....	1,024 51
Do	1884	.....	.....	.....	.....	59,837 08	59,837 08	46,979 00	.....	12,858 08
Repairs and preservation of navy-yards	1882	.....	.....	1,613 01	.....	.....	1,613 01	.....	1,613 01	.....
Do	1883	.....	.....	16,353 09	.....	45 91	16,399 00	5,298 00	.....	11,101 00
Do	1884	22	620	.....	150,000 00	458 18	150,458 18	143,302 00	.....	7,156 18
Headstones national cemeteries, Philadelphia	1882	.....	.....	356 50	.....	.....	356 50	.....	356 50	.....
Enlistment bounties to seamen	1877†	.....	.....	33 35	.....	.....	33 35	.....	.....	33 35
Do	1878†	.....	.....	100 00	.....	.....	100 00	.....	.....	100 00
Do	1879†	.....	.....	8 84	.....	66 16	75 00	66 67	.....	8 33
Do	1880†	.....	.....	6 63	.....	33 34	39 97	33 34	.....	6 63
Medical Department	1882	.....	.....	224 80	.....	105 57	330 37	330 37	.....	.....
Do	1883	.....	.....	7,975 52	.....	6,731 92	14,707 44	10,757 81	.....	3,949 63
Do	1884	22	476	.....	40,000 00	6,918 96	46,918 96	31,782 77	.....	15,136 19
Museum of hygiene, medicine, and surgery	1883	.....	.....	2,228 03	.....	1,697 71	3,925 74	3,916 60	.....	9 14
Naval hospital fund	1882	.....	.....	17 79	.....	110 15	127 94	.....	127 94	.....
Do	1883	.....	.....	7 62	.....	6 53	14 15	.....	.....	14 15
Do	1884	22	476	.....	30,000 00	1,457 28	31,457 28	31,442 00	.....	15 28
Do	.....	.....	.....	143,154 03	.....	45,970 97	189,125 00	93,682 06	.....	95,442 94
Repairs, Bureau of Medicine and Surgery	1882	.....	.....	189 02	.....	335 13	524 15	.....	524 15	.....
Do	1883	.....	.....	5,049 73	.....	395 79	5,445 52	4,880 00	.....	559 52
Do	1884	22	476	.....	15,000 00	1,146 14	16,146 14	15,592 62	.....	553 52
Contingent, Bureau of Medicine and Surgery	1882	.....	.....	665 68	.....	248 07	913 75	89 51	824 24	.....
Do	1883	.....	.....	3,550 08	.....	139 51	3,689 59	2,076 97	.....	1,612 62
Do	1884	22	476	.....	25,000 00	735 79	25,735 79	15,145 10	.....	10,590 69
Civil establishment, Bureau of Medicine and Surgery	1882	.....	.....	381 35	.....	.....	381 35	.....	381 35	.....
Do	1883	.....	.....	723 97	.....	577 18	1,301 15	610 10	.....	691 05
Do	1884	22	476	.....	20,000 00	304 72	20,304 72	20,112 32	.....	192 40
Provisions, Navy	1879*	.....	.....	.....	.....	54 30	54 30	27 00	.....	27 30
Do	1882	.....	.....	1,018 68	.....	80 90	1,099 58	1,099 58	.....	.....
Do	1883	.....	.....	56,124 98	.....	3,166 60	59,291 58	59,291 58	.....	.....
Do	1884	22	476	.....	1,100,000 00	5,408 02	1,105,408 02	1,005,494 43	.....	99,913 59
Clothing, Navy	.....	.....	.....	344,585 90	.....	300,982 91	645,568 81	182,879 78	.....	462,689 03
Small stores, Bureau of Provisions and Clothing	.....	.....	.....	127,049 94	.....	92,826 17	219,876 11	59,166 98	.....	160,709 13
Contingent, Bureau of Provisions and Clothing	1882	.....	.....	24,019 68	.....	60	24,020 28	26 00	23,994 28	.....

Do	1883			32,293 68		610 87	32,904 55	949 49		31,955 06
Do	1884	22	476		40,000 00	762 89	40,762 89	31,202 27		9,560 62
Civil establishment, Bureau of Provisions and Clothing	1882			2 21			2 21		2 21	
Do	1883			595 81		20 06	615 87			615 87
Do	1884	22	476		6,000 00		6,000 00	6,000 00		
Construction and Repair	1881					25	25		25	
Do	1881			78			78		78	
	1882									
Do	1882			51,090 41		1 10	51,091 51			51,091 51
Do	1883			109,817 96		7,882 48	117,700 44	75,213 98		42,486 46
Do	1884	22	476		1,334,000 00	28,746 57	1,362,746 57	1,314,719 88		48,026 69
		23	17							
Construction and Repair, act June 14, 1878 (timber)				58,291 39			58,291 39			58,291 39
Civil establishment, Construction and Repair	1882			270 78			270 78		270 78	
Do	1883			2,097 58		1 49	2,099 07			2,099 07
Do	1884	22	476		20,000 00	15	20,000 15	17,024 00		2,976 15
Bureau of Steam Engineering, act June 14, 1878				21,731 68			21,731 68			21,731 68
Steam machinery	1882			7,931 91		1,385 76	9,317 67	350 76		8,966 91
Do	1883			117,062 32		2,997 30	120,059 62	117,990 45		2,069 17
Do	1884	22	477		1,000,000 00	59,154 48	1,059,154 48	1,008,940 52		50,213 96
Do	1881			1,212 16			1,212 16		1,212 16	
	1882									
Contingent, Steam Engineering	1884	22	477		1,000 00		1,000 00	505 75		494 25
Civil establishment, Steam Engineering	1882			08			08		08	
Do	1883			577 72		6 44	584 16			584 16
Do	1884	22	477		10,000 00	8 04	10,008 04	9,040 04		968 00
Prize-money to captors				556,908 43		3,171 81	560,080 24	10,275 45		549,804 79
Double-turreted monitors				323,509 96		357 48	323,867 44	121,987 18		201,880 26
Machinery, double-turreted monitors				1,000,000 00		83	1,000,000 83	394,621 84		605,378 99
Preservation of Chevalier de Ternay monument at Newport, R. I				800 00			800 00			800 00
Preservation of cemeteries in foreign countries	1882			2,738 76			2,738 76	1,089 44	1,649 32	
Navy pension fund						630,000 00	630,000 00	630,000 00		
Payment of officers and crew of the Kearsarge for destruction of the Alabama				1,639 30			1,639 30			1,639 30
Extra pay of officers and men who served in the Mexican war		20	316		1,028 00	1,680 00	2,708 00	2,708 00		
Indemnity for lost clothing	1878†			40 00			40 00			40 00
Do	1877†			118 75			118 75	58 75		60 00
Do	1876†			120 00			120 00			120 00
Do		R. S.	3689		1,429 93	420 00	1,849 93	1,849 93		
Gratuity to machinists in lieu of re-enlistment						811 50	811 50		811 50	
Carried forward				7,417,753 30	14,407,372 38	1,431,691 67	23,256,817 35	17,407,415 44	201,751 23	5,647,650 68

* And prior years.

† Prior to July 1.

Statement showing the balances of appropriations unexpended June 30, 1883, &c.—Continued.

Specific objects of appropriations.	Year.	Statutes. Vol.	Statutes. Page or section.	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
NAVAL ESTABLISHMENT—continued.										
Brought forward	.....	.....	.....	$7,417,753 30	$14,407,372 38	$1,431,691 67	$23,256,817 35	$17,407,415 44	$201,751 23	$5,647,650 68
Bounty for destruction of enemy's vessels	1887*	.....	.....	49 20	.....	.....	49 20	.....	.....	49 20
Do	1878*	.....	.....	.....	.....	71 11	71 11	.....	.....	71 11
Do	1879*	.....	.....	.....	.....	55 36	55 36	.....	.....	55 36
Do	1880*	.....	.....	.....	.....	17 45	17 45	.....	.....	17 45
Do	.....	.....	.....	.....	.....	2,571 10	2,571 10	.....	2,571 10	.....
Search for steamer Jeannette, Arctic Expedition	.....	.....	.....	18,271 71	.....	1,172 77	19,444 48	.....	.....	19,444 48
Removal and burial of remains of Lieutenant De Long and companions	.....	.....	.....	25,000 00	.....	55	25,000 55	1,804 76	.....	23,195 79
Payment of Japanese award, act of February 22, 1883	.....	.....	.....	51,524 44	.....	4,322 92	55,847 36	16,023 92	.....	39,823 44
Payment to T. C. Bashor & Co	.....	.....	.....	9,734 71	.....	.....	9,734 71	.....	9,734 71	.....
Payment to captain and owners of North Star for rescue of United States steamer Rodgers	.....	.....	.....	20,000 00	.....	.....	20,000 00	20,000 00	.....	.....
Relief of the children of Otway H. Berryman and others	.....	.....	.....	12,367 84	.....	.....	12,367 84	.....	.....	12,367 84
Relief of officers and crew of United States steamer Rodgers	.....	22	620	.....	103 32	391 68	495 00	495 00	.....	.....
Reward for services to officers and crew of United States steamer Rodgers	.....	.....	.....	1,200 00	.....	.....	1,200 00	.....	.....	1,200 00
Relief of sufferers by wreck of United States steamer Huron	.....	20	497	.....	318 00	.....	318 00	318 00	.....	.....
Expenses in connection with the Arctic Exploring Expedition	.....	.....	.....	12,504 64	.....	.....	12,504 64	913 76	.....	11,590 88
Relief of Lady Franklin Bay Expedition to the Arctic regions	.....	23	267	.....	696,640 55	13,652 27	710,292 82	710,292 82	.....	.....
General account of advances	.....	.....	.....	†818,668 31	.....	4,959,108 99	4,140,440 68	5,547,713 55	.....	†1,407,272 87
Destruction of clothing and bedding for sanitary reasons	.....	.....	.....	1,273 59	.....	.....	1,273 59	680 06	.....	593 53
Total	.....	.....	.....	6,751,011 12	15,104,434 25	6,413,055 87	28,268,501 24	23,705,657 31	214,057 04	4,348,786 89

* Prior to July 1.

† Debit balances.

RECAPITULATION.

	Balances of appropriations July 1, 1883.	Appropriations for the fiscal year ending June 30, 1884.	Repayments made during the fiscal year 1884.	Aggregate available for the fiscal year ending June 30, 1884.	Payments during the fiscal year ending June 30, 1884.	Amounts carried to the surplus fund June 30, 1884.	Balances of appropriations June 30, 1884.
Treasury	$18,786,354 18	$24,375,431 51	$2,425,638 48	$45,587,424 17	$28,985,238 38	$2,370,570 82	$14,231,614 97
Judiciary	712,162 19	3,183,559 42	209,878 14	4,105,599 75	3,253,918 66	134,304 04	717,377 05
Diplomatic	675,030 86	1,408,335 00	173,583 86	2,256,949 72	1,434,350 23	83,967 29	738,632 20
Customs	4,578,786 00	21,502,728 79	909,775 67	26,991,290 46	23,696,061 75	661,629 77	2,633,598 94
Interior civil	2,443,575 49	7,812,079 99	75,069 18	10,330,724 66	8,688,030 59	65,085 79	1,577,608 28
Internal revenue	285,865 54	8,975,836 92	22,220 07	9,283,922 53	8,678,999 49	70,034 49	534,888 55
Public debt	.....	315,099,413 98	6,921 18	315,106,335 16	315,105,990 16	345 00	.....
Interior—Indians	13,076,735 93	6,407,800 20	211,884 74	19,696,420 87	6,684,601 35	106,954 95	12,904,864 57
Interior—Pensions	37,585,420 32	86,705,209 67	16,441,452 62	140,732,082 61	71,870,680 68	11,755,235 54	57,106,166 39
Military establishment	14,261,694 89	33,271,601 56	1,547,536 74	49,080,833 19	40,980,422 78	1,004,887 85	7,095,522 56
Naval establishment	6,751,011 12	15,104,434 25	6,413,055 87	28,268,501 24	23,705,657 31	214,057 04	4,348,786 89
Total	99,156,636 52	523,846,431 29	28,437,016 55	651,440,084 36	533,083,951 38	16,467,072 58	101,889,060 40

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49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. DOC. No. 111.

GREEN AND BARREN RIVER NAVIGATION COMPANY.

LETTER

FROM

THE ACTING SECRETARY OF WAR,

TRANSMITTING

A report upon the commercial value and importance of the works of the Green and Barren River Navigation Company.

JANUARY 27, 1887.—Referred to the Committee on Rivers and Harbors and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 26, 1887.

The Acting Secretary of War has the honor to transmit to Congress, in compliance with the provisions of the river and harbor act of August 5, 1886, a report of a board of engineers constituted in accordance with the provisions of the act to ascertain the value and commercial importance of the works and property of the Green and Barren River Navigation Company, situated on the Green and Barren rivers, in the State of Kentucky.

S. V. BENÉT,
Brig. Gen., Chief of Ordnance,
and Acting Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., January 24, 1887.

SIR: I have the honor to submit herewith the report of the Board of Engineer Officers constituted to carry into effect the following provision of the river and harbor act of August 5, 1886, that—

The Secretary of War is hereby authorized and directed to ascertain the value and commercial importance of the works and property of the Green and Barren River

Navigation Company, situated on the Green and Barren rivers, in the State of Kentucky; * * * * and in order to acquire such information the Secretary of War shall appoint a board of three competent engineers from the Engineer Corps of the United States Army, which board shall * * * report to the Secretary of War, who shall report thereon to Congress at its next succeeding session.

Very respectfully, your obedient servant,

J. C. DUANE,
Brig. Gen., Chief of Engineers.

Hon. WM. C. ENDICOTT,
Secretary of War.

REPORT OF BOARD OF ENGINEERS.

PITTSBURGH, PA., *December* 21, 1886.

GENERAL: The act of Congress approved August 5, 1886, provided that—

The Secretary of War is hereby authorized and directed to ascertain the value and commercial importance of the works and property of the Green and Barren River Navigation Company, situated on the Green and Barren rivers, in the State of Kentucky; * * * and in order to acquire such information the Secretary of War shall appoint a board of three competent engineers from the Engineer Corps of the United States Army, which board shall * * * report to the Secretary of War, who shall report thereon to Congress at its next succeeding session; and the cost of such examination shall be paid out of the sum appropriated by this act for surveys: *Provided*, That nothing herein shall be construed as committing Congress to the purchase of the said works.

By direction of the Secretary of War a board of officers, consisting of Col. James C. Duane, Maj. William R. King, and Maj. Alexander Mackenzie, was constituted by Special Order No. 112, Headquarters Corps of Engineers, United States Army, Washington, D. C., August 13, 1886, to consider and report upon the questions referred to in foregoing act of Congress.

By letter of the Chief of Engineers, dated October 18, 1886, Maj. Amos Stickney, Corps of Engineers, was detailed as a member of the Board, *vice* Colonel Duane, who was relieved in consequence of his appointment as Brigadier-General and Chief of Engineers, United States Army.

The matters requiring investigation having been considered and reported upon by Lieut. Col. W. E. Merrill and Maj. J. C. Post, Corps of Engineers, United States Army, and much information being collected in the engineer offices at Cincinnati, Ohio, a preliminary meeting was held there on the 22d, 23d, and 24th of September.

After organization the following instructions from the Chief of Engineers were received and considered:

It is desired that the Board avail itself of all attainable information upon the subjects upon which it is required to report, and to this end it will visit the localities; hold public meetings, giving due notice thereof through the newspapers, or otherwise as may appear best; invite discussion orally or in writing, and, in brief, use every effort to inform itself in regard to the origin of the works, respectively; the means provided for their construction, and their cost; also in reference to their present and prospective value to the interests of the commerce and navigation likely to be promoted by their acquisition and improvement by the Government, with the view of making the reports full, complete, and exhaustive, and to this end every avenue of information should be pursued to its source.

It is suggested in this connection that Lieut. Col. William E. Merrill and Capt. James C. Post, Corps of Engineers, may be able to furnish from the records of their offices valuable data in reference to the works specified in the act, and the Board is authorized to call upon them accordingly.

During the session of the Board in Cincinnati the following circular letter was prepared and distributed:

* * * * * * *

In accordance with the above provision of law, the Secretary of War has appointed a Board of Engineers, consisting of Col. James C. Duane, Maj. William R. King, and Maj. Alexander Mackenzie, to examine and report upon the Green and Barren * * * rivers.

It is the desire of this Board to collect all available information relating to the commercial importance, present and prospective, of the rivers under consideration, and such facts as may assist in forming a proper estimate of the present value of the five locks and dams on the Green and Barren rivers, built by the State of Kentucky, and now in possession of the G. and B. Navigation Company.

* * * * * * *

You are respectfully invited to submit, at your earliest convenience, any information or suggestions which, in your opinion, have any bearing on the questions before the board.

* * * * * * *

On the 25th of September the Board met at Bowling Green, Ky., and in company with the officers of the Navigation Company and others went over the rivers from Bowling Green, Ky., to Evansville, Ind.

Through correspondence and personal interviews and from records and reports a large amount of information has been secured; but much of such information has been in the form of opinions rather than facts, and on some points is so indefinite as to render positive statements by the Board impracticable. In this connection it may be proper to state that the powers of the Board have only permitted requests for information, and compliance has been at the will of those from whom facts were solicited.

Having considered all the information presented, the Board has the honor to submit the following report, with appendices, upon—

The commercial importance and value of the works and property of the Green and Barren River Navigation Company, situated on the Green and Barren rivers, in the State of Kentucky.

The river and harbor act of March 3, 1879, directed a survey of "Green River and its tributaries Muddy and Barren rivers, Kentucky." This survey was assigned to Maj. W. E. Merrill (now Lieutenant-Colonel), Corps of Engineers, who submitted a report under date of February 21, 1880. This report, with appendices, is printed as Senate Ex. Doc. No. 116, Forty-sixth Congress, second session. The act of July 5, 1884, provided that—

The Secretary of War is hereby directed to report to Congress at its next session, or sooner if practicable, the condition of the Green and Barren rivers * * * and the provisions and estimates of cost necessary to relieve the same from incumbrance, with a view to such legislation as will render the same free to commerce at the earliest practicable period.

This question was referred to Capt. (now Major) James C. Post, Corps of Engineers, who submitted a report under date of January 27, 1885, which is printed as House Ex. Doc. No. 212, Forty-eighth Congress, second session. A resolution of the House of Representatives of February 15, 1886, called upon the Secretary of War—

To ascertain and report at the earliest practicable period upon what terms the franchises and property of the Green and Barren River Navigation Company, in Kentucky, can be obtained and conveyed to the United States, so that said streams may be opened with their large commerce free to the people of the States.

A report upon this matter was submitted by Maj. J. C. Post, March 17, 1886, and is printed as House Ex. Doc. No. 152, Forty-ninth Congress, first session.

In the above-mentioned reports the subjects of Green and Barren River Navigation and the franchises of the company, which now controls its navigation under a lease from the State of Kentucky, are discussed at length. The following extracts are taken from the report of Major Post:

* * * * * * *

The Green and Barren rivers lie wholly within the State of Kentucky, and with their tributaries drain an area of about 10,000 square miles, nearly all of which is contained within the State. Their general direction is northwest, and the Green, after receiving the waters of the Barren River, empties into the Ohio, about 8 miles above Evansville, Ind.

About fifty years ago the State of Kentucky undertook the improvement of these rivers by locks and dams. Six locks and dams upon the Green River, and one upon the Barren, were placed under contract. Of these, four locks and dams upon the Green, and the one upon the Barren, were completed, and the slackwater system, as it now exists, was opened to navigation in 1841. The two additional locks and dams upon the Green River were not constructed.

The first lock and dam on the Green River was placed at Spottsville, 8¼ miles from the Ohio; the second at Rumsey, 51¾ miles from the first; the third at Rochester, 43½ miles from the second, and the fourth at Woodbury, 41½ miles from the third. No. 1, Barren River, is at Green Castle, 15 miles from No. 4, Green River.

These five locks and dams, together with the backwater from the Ohio, give continuous navigation for a draught of 4 feet from the Ohio River to Bowling Green, a distance of 175 miles. They are owned by the State of Kentucky, and were operated by the State until 1868.

In 1868 the Green and Barren Navigation Company was chartered by the legislature of Kentucky, and the locks and dams were transferred to its control for a period of thirty years.

* * * * * * *

Under the arrangement made, the Green and Barren Navigation Company became the practical owners of the property belonging to the State of Kentucky upon these rivers. This property consisted of the locks and dams, and the lands adjacent thereto, with the buildings and the water-power resulting from the dams.

* * * * * * *

The navigation of the Green and Barren rivers, as far as the slackwater system extends, is in good condition. The locks are serviceable, and are built of coursed masonry. All the land walls, which were originally built too thin, have yielded, with exception of the one at No. 4 (Woodbury), to the pressure of the earth behind them. That of the lock at Rumsey leans more than a foot, and has been tied back with iron rods to a crib sunken in the earth in its rear to prevent a continuance of the action and the wall from falling. It seems to be in a stable condition at present, but it is exceedingly doubtful how long it will remain so. A mill-race behind the land wall at Woodbury prevents it from receiving as much pressure as the others.

The lower gates of all the locks are new, and are good and substantial. The upper gates are much older, and generally out of repair.*

All the dams are wooden, and are composed of cribs filled with stone covered with sheeting. They are apparently strong and firm, and bear evidence of recent repairs.

The abutments of Nos. 1 and 2 are of masonry, and at No. 3, Green River, and No. 1, Barren River, are natural rock bluffs. That at No. 4 is composed of wooden cribs.

* * * * * * *

From a letter addressed to Lieut. Col. W. E. Merrill by General D. C. Buell, the following description is taken:

* * * * * * *

Green River is distinguished by some remarkable characteristics. It rises in the central portion of Kentucky, flows with a gradual descent in a general course a little south of west to within about 100 miles of its mouth, and thence in a northwesterly direction to the Ohio, 10 miles above Evansville. It drains a large extent of country, comparatively level or moderately hilly, and is therefore not subject to the sudden and torrent-like freshets which characterize rivers that have mountain sources. A striking feature is its great depth in the last 150 miles of its course, with only occasional obstructions from rocky reefs. In the natural pools thus formed, from 20 to 30 feet is a common depth. Another peculiarity is the subterranean character of its sources. Perhaps it is this peculiarity, combined with the great depth, that preserves a comparatively mild temperature in the water, so that the river in its lower portion is rarely obstructed by ice. The mouth of Green River has always been a

---

* The upper gates have been rebuilt, and are now in good condition.

noted harbor for boats of every description in the season of ice on the Ohio. Still another peculiarity for a river of its size is the considerable number of tributaries adapted to navigation of from 15 to 30 miles or more, thus extending the area of its usefulness as an avenue for commerce. Pond River, Rough Creek, Mud River, Big Barren, Bear Creek, and Nolin, respectively about 60, 80, 140, and 180 miles from its mouth, are examples of this sort. The river varies in breadth from about 200 yards at the mouth to about 100 yards at the confluence of the Big Barren. Rock foundations are found at all desirable points for locks and dams, and building materials, timber, and stone of every desirable kind are available everywhere. The banks have an average height of about 30 feet above low water, and the river is bordered by a rich bottom land varying from about 400 yards at the Big Barren to perhaps nearly a mile at the mouth. The bottoms are often overflowed, but less frequently and to a less depth, I think, within the last twelve years than formerly. The change may be ascribed to the clearing of the land for the sake of the timber.

* * * * * * *

From the preceding extracts, and other sources, it appears—

That the Green and Barren rivers form an important line of navigation through a country rich in mineral and agricultural products. In a state of nature, these streams were, at certain stages, obstructed by rapids, which boats could not pass. About fifty years ago, the State of Kentucky most wisely improved these rivers, by constructing five locks and dams, giving continuous slackwater navigation throughout the year, from the Ohio River to Bowling Green, a distance of 175 miles.

The locks and dams were built under difficulties which increased their cost, but the work was well done. These locks were made 150 feet long and 36 feet wide, giving a capacity which it was thought would be sufficient for all future needs of commerce and navigation; but, it is now apparent that, to avoid delays and reduce cost of transportation to a minimum, larger locks will be desirable in the future.

For a number of years after completion, the locks were operated and tolls were collected by the State of Kentucky; but, in 1868, by an act of the legislature, the Green and Barren River line of navigation was leased for a period of thirty years to the Green and Barren River Navigation Company, with power to collect tolls, operate mines, run steamboats, and conduct a general business. The practical effect of this lease has been to give the exclusive right of free transportation to the company and render competition impracticable. This condition of affairs will continue till March 9, 1898, unless the rights of the company are extinguished by purchase or other legal means.

In 1880 the Kentucky legislature, in behalf of the commercial interests of the Green and Barren rivers, attempted to repeal the act which gave to the navigation company its privileges; but such action was declared illegal by the supreme court of the State, which court at the same time called attention to the fact that the State could, when the same was demanded by public necessity, resume control of the Green and Barren rivers upon the payment to the company of a just compensation.

In place of such action as was suggested by the decision of the court, the Kentucky legislature in 1886 ceded to the United States the five locks and dams on the Green and Barren rivers, upon the condition that the United States rather than the State should extinguish by "purchase or otherwise the claim of the navigation company to exact tolls and control the rivers."

Discussions upon commercial importance, value of works and property, legislation, rates of toll, &c., compiled by the Board, and letters having an important bearing on the questions under consideration, are given as appendices to this report.

Referring to such appendices for details and reasons the Board would submit the following summary and conclusions:

COMMERCIAL IMPORTANCE.

The Green River and its tributary, the Big Barren, are streams most favorably adapted to purposes of navigation, and they with their branches are the natural outlet for a country rich in mineral and agricultural wealth, and by connecting this tributary country, through the Ohio, with the markets of the Mississippi Valley, are capable of being made important navigable waters of the United States.

These rivers are at the present time, by reason of the charter granted a private corporation by the State of Kentucky, virtually closed to general commerce, and the country tributary to the rivers is placed at a great disadvantage. The tolls, which prohibit competition in transportation, and the uncertain results of any enterprise which is dependent on the will of a monopoly, prevent the investment of capital which is necessary for a full development of the country.

Considering the relative advantages of this line of navigation and the natural resources of the country, as compared with other streams and territory, it appears most probable that the improvement of the Green River and its tributaries would have been undertaken by the United States long ago had not the conditions been such as to withdraw these rivers from the fostering care of the General Government.

The value of existing commerce is placed at $6,000,000 per annum. The possible commerce with the rivers in a free and fully improved condition is very great, greater in fact than that of many other streams which are now being improved by Congressional appropriations at great expense.

VALUE OF EXISTING WORKS OF IMPROVEMENT.

These works, which are the property of the State of Kentucky, consist of five locks and dams. The present intrinsic value of the works is placed by the Board at $350,000. and the money value of benefits which would accrue to general commerce from a release from the control exercised by the Green and Barren River Navigation Company is considered to be not less than $30,000 per annum, which yearly saving would amount, during the remaining life of the company's lease, to an amount equal, at least, to the present intrinsic value of works.

VALUE OF PROPERTY (FRANCHISE) OF THE GREEN AND BARREN RIVER NAVIGATION COMPANY.

The company's property consists of chartered rights granted them by the State of Kentucky. In the works themselves they have no ownership. The company, while disclaiming any desire to dispose of their property, offer the same to the United States for a sum based upon its estimate of the earning capacity of the franchise. At the date of the proposition, November 26, 1886, with eleven years and four months for lease to run, the value is placed at $338,000. On the 30th of next June this value would be about $325,000.

The Green and Barren River Navigation Company is now the legal owner of this property, and, so long as a voluntary sale is under consideration, the company has an undoubted right to fix the selling price.

Considering the value of the franchise in the light of damages to the business of the company, which might follow an abrogation of the right

ILLINOIS

INDIANA

KENTUCKY

TENNESSEE

EVANSVILLE

Louisville

Owensborough

Spottsville

LOCK 1

Bluff City

Birks City

Curdsville

Delaware

Panther Cr.

Mason Cr.

Deer Cr.

Calhoun

LOCK 2

Ashbys Burgh

Rumsey

Mt. Pleasant

Rough Cr.

C.T.O.R.R.

Smallhouse

Coxeby R.

Cromwell

Pond R.

S. Carrollton

Paradise

LOCK 3

Mining City

Rochester

Morgantown

LOCK 4

Woodbury

Logansport

Munfordville

Green R.

Greensburg

Bromleysville

MAMMOTH CAVE

Clifty Cr.

Muddy R.

Rockland

LOCK 5

Greencastle

L.&N.R.R.

Barren R.

Bowling Green

Claysfoot

Tennessee R.

Cumberland R.

H Ex 111 49 2

to collect tolls, their price seems excessive, but the Board does not consider that its powers are sufficient to determine the extent of such damages.

CONCLUSION.

The Board is of the opinion that, in justice to the country tributary to the Green and Barren rivers, the present obstructive tax on its commerce should be removed, and it is also of the opinion that the commercial importance of these rivers is sufficiently great to justify the General Government in extending aid to their improvement.

There appears to be three methods by which the General Government can secure control of the Green and Barren rivers and their works of improvement.

(1) By purchasing the chartered rights on the most reasonable terms the Green and Barren River Navigation Company will accept, as provided for by the act of the Kentucky legislature.

(2) By condemnation, with just compensation, as determined by the proper legal tribunal. This method is also contemplated by the act of the Kentucky legislature, which cedes the works to the United States on condition that the claims of the company are extinguished by purchase or otherwise.

(3) By accepting the works and assuming control of the improvements of the Green and Barren rivers, on the condition that the State of Kentucky will first extinguish the franchise, as suggested by the State court of appeals. On such a basis, the Board is of the opinion that the interests involved are sufficient to justify the General Government in re-imbursing the State in an amount not exceeding $350,000, the estimated present intrinsic value of the works.

Respectfully submitted.

W. R. KING,
Major of Engineers.
AMOS STICKNEY,
Major of Engineers.
A. MACKENZIE,
Major of Engineers.

The CHIEF OF ENGINEERS, U. S. A.

APPENDICES.

1. Letter of General Duane to C. G. Smallhouse, president of the Navigation Company, requesting information.—Reply of Mr. Smallhouse, November 26, 1886.—Three letters of Mr. Smallhouse to Captain Post, dated November 27, 1884, January 2, 1885, March 8, 1886, touching the value of the company's franchise and the commercial importance of the rivers.—Letter of General D. C. Buell, November 18, 1886, in regard to commercial importance of the Green and Barren rivers, and value of the company's franchise.—Letter of Captain A. H. Edwards, of Evansville, Ind., October 30, 1886, on commercial importance of the Green and Barren rivers, and condition of the works under State and company management.
2. Commercial importance of the works of improvement on Green and Barren rivers.
3. Value of franchise of the Green and Barren River Navigation Company.
4. Cost of locks and dams on Green and Barren rivers, and present values to the United States.
5. Legislation, &c., concerning Green and Barren River Navigation Company.
6. Rates of toll and resulting tax on commerce.

APPENDIX 1.

LETTERS BEARING ON COMMERCIAL IMPORTANCE AND VALUE OF WORKS AND PROPERTY.

CINCINNATI, OHIO, *September* 24, 1886.

DEAR SIR: The act of Congress approved August 5, 1886, an extract from which is given in inclosed letter, requires the Board of Engineers of which I am president to collect for the information of Congress certain facts relating to the Green and Barren rivers line of navigation, which is at present controlled and managed by a company of which you are the president.

The Board are in possession of letters addressed by you to Capt. J. C. Post, Corps of Engineers, U. S. Army, under dates of November 27, 1884, January 2, 1885, and March 8, 1886. These letters contain a proposition to transfer the lease of the Green and Barren rivers' locks and dams to the United States for a sum based upon the earnings of the company for the year 1884 and the life of the lease. I would be pleased to know if this is the proposition you would wish to have considered by this Board, and what under such proposition will be your estimated value of your franchise June 30, 1887.

The Board will be pleased to receive any additional information you may think proper to present as regards present and possible commerce of the Green and Barren rivers, and the probable effect on such commerce of the abolishing of the tolls which are now authorized by acts of the Kentucky legislature.

The Board would also be glad to have any statements which you may be pleased to furnish regarding number of boats and amount of freight passing through the locks, the amount of tolls and rents collected at each lock, the amount expended by your company for repairs, and improvements, the rates of tolls charged, direct or included in freight rates, and the relative freight rates charged by your company as compared with competing transportation routes.

In general the Board would like to have all attainable information which may tend to show the value of the franchise of the Green and Barren River Navigation Company, and the effect on commerce and navigation of the present system of management of the Green and Barren rivers line of navigation as compared with a system of management by the General Government, which would include the abolition of tolls.

Very truly and respectfully,

J. C. DUANE,
Colonel of Engineers.

Mr. C. G. SMALLHOUSE,
President Green and Barren River Navigation Company,
Bowling Green, Ky.

GREEN AND BARREN RIVER NAVIGATION COMPANY,
Bowling Green, Ky., November 26, 1886.

SIR: Complying with request of James C. Duane, Colonel of Engineers, United States Army, and president of Board of Engineers appointed by the Honorable Secretary of War under an act of Congress approved August 5, 1886, "to ascertain the value and commercial importance of the works and property of the Green and Barren River Navigation Company," and in reply to your several letters dated September 24, 1886, and October 9, 1886, asking for certain information to enable you to make a report in accordance with the provisions of the above-cited act, I am directed by the company which I represent to say that Congress has, in a report previously rendered by Capt. James C. Post, of the Corps of Engineers, been fully advised upon the questions referred to in your letters, and that all the information which is now in our possession was given in detail to Captain Post in my letters dated November 27, 1884, and March 8, 1885, which you will find annexed to the reports made by Captain Post to the Secretary of War and submitted to Congress.

It is proper to state the investigations which have been heretofore made and the one you are now making concerning the commercial value of this company's franchise were not instituted by us with a view to disposing of our property to the General Government, and we have never manifested the least desire to transfer our franchise. All the steps which have been taken on the part of the Government, I apprehend, have been for the purpose of ascertaining to what extent the general commerce of the country is influenced by reason of chartered rights on Green and Barren rivers. My company has manifested a desire to afford to the authorities acting under the direction of Congress every facility in our possession to determine whether or not the terms we have offered to the Government for the extinguishment of our charter are exorbitant or more than

the property is worth to us as a dividend-paying investment. In my correspondence with the engineers whose duty it was to inquire into the matter I have fully and cheerfully given such facts as I had, and, I think, demonstrated very clearly that we have a valuable property, the returns from which are perfectly satisfactory to the stockholders, and that they are in no wise disposed to part with it except for a just and equitable consideration.

The act of Congress under which your report will be made directs the Secretary of War "to ascertain the value and commercial importance of the works and property" of this company. As a matter of fact we have no property rights in the "works" on these rivers; they belong to the State of Kentucky and have been ceded by the State to the United States Government on condition that the latter will, by "purchase or otherwise," extinguish our franchise, which has a limited time to run. It is not difficult to arrive at an approximate value of the "works" on the rivers. They were originally constructed by the State at a cost of more than $800,000. Upon assuming control of the rivers the locks and dams were found by this company in bad condition, and for several years the entire earnings were expended in improving and repairing the works. From an estimate furnished by our superintendent the total cost of keeping the rivers in good navigable condition since they came under our control has been about $250,000. This estimate is somewhat less than one given to Captain Post, but is taken from our books, and is nearer correct than the one given in my former statement, which was given without close investigation. The United States engineers have, within the last two years, made careful examination of the locks and dams, and can nearer approximate their actual worth to the Government than I can. With that we have nothing to do. We have a property represented by a certain franchise, granted to us by the State of Kentucky. It is that property which the Government contemplates purchasing, and it is the only property over which we assume control and considered by us in the proposition we have made to the Federal authorities. This property has to us a certain monetary value.

Upon its possession hinges the earning capacity of this company, and upon its capacity to earn dividends for the stockholders must its value to the commerce of the country at large be fixed. We do not consider it wise or prudent to exhibit in a public document the extent of our business or the net profits arising from it further than is contained in my former letters to Captain Post. We have made a calculation, based upon our receipts during a number of years past, and estimated by the rules for ascertaining the present worth of a fixed income for a number of years, and arrived at the conclusion that our franchise was worth to us two years ago $400,000. The net profits of our business for the years 1885 and 1886 have not been diminished, nor have we any occasion to fear that our earnings will be decreased during the remaining years of our charter. By the same arithmetical process we estimate that our franchise is worth now, in round numbers, $340,000, actually about $338,000. We can therefore see no reason or justification for naming a less sum than that embraced in our first proposition to the Government for the possession of our franchise.

Concerning the amount of business represented by the carrying trade of our boats on these rivers, the extent of commerce of Green and Barren rivers, and their relation to the general commerce of the country, the tolls charged by this company, and the probable effects of said tolls upon the commerce of the country, I gave all the information I had or now have in my possession to Captain Post, and respectfully refer you to them, believing you will find therein the information you seek, and which will enable you to arrive at a solution of the matter under consideration.

In closing this communication I desire, in behalf of this company, to suggest that whatever action is determined upon by Congress in reference to this matter a speedy solution of it will be gratifying to us. We are disposed to meet the Government fairly, and will afford its agents every facility we have to verify the statements we have made, even to an inspection of our books and accounts. Delay in arriving at a final settlement is detrimental to our interests, and is the cause of withholding certain investments which are awaiting the termination of these negotiations. I trust your report will be ready for presentation to Congress early in its approaching session.

Respectfully,

C. G. SMALLHOUSE,
President.

Maj. A. MACKENZIE,
Corps of Engineers, U. S. A.

LETTERS FROM THE PRESIDENT OF THE GREEN AND BARREN RIVERS NAVIGATION COMPANY.

BOWLING GREEN, KY., *November* 27, 1884.

DEAR SIR: Your favor of the 21st October came duly to hand. My reply has been delayed longer than I wished, owing to inability on the part of our superintendent to

sooner collate data from which I could intelligently supply you with the information desired. In replying to your series of interrogatories I shall reserve until the last my answer to your first question. Noting your second question, I have to say: The commerce upon the Green and Barren rivers for the past year includes a vast amount that was not controlled by our line. I cannot, therefore, furnish you with anything like an accurate estimate of the volume of business carried on on these waters. Speaking for our line, and relying upon carefully prepared statistics furnished by our superintendent, I place the amount of freight carried on our steamers during the twelve months ending 30th instant at 50,000 tons, exclusive of the transportation of coal from the mines along Green River to points touched by our steamers. The extent of this coal business is assuming large dimensions, and will perhaps aggregate three-quarters of a million bushels, over a half million bushels being delivered at the port of Bowling Green alone. This branch of our company's business is deserving of especial mention in your report upon the resources of Green and Barren rivers. When the mining interests along these rivers shall have been fully developed, I predict that no portion of the Commonwealth will exceed this in point of solid wealth, and I believe that once under the control of the General Government, with free locks, the wealth of this section would be rapidly developed. Our company is laboring to the extent of its ability to accomplish that end, and encourages others to do so; but with a limited capital and heavy expense in maintaining navigation, it is not presumed that we can accomplish what we desire to see along these rivers. Another source of great wealth along Green and Barren rivers and their tributaries is the almost inexhaustible supply of valuable timber.

The marketing of logs and the various timber products furnishes employment to a large number of laborers, and results in furnishing capital a profitable return on investment. This business, already large, is susceptible of being very greatly increased in volume, and if developed to the extent possible to secure it would add largely to the carrying trade of the rivers and to the wealth of those engaged in the business. With all these varying interests being developed, and having no means of acquiring information concerning the amount of business done by others than our own company, I can give you no estimate that would enable you to form a correct idea of the value of Green and Barren rivers as navigable streams. You can see at once that the resources along their waters are very great, and the amount of carrying trade susceptible of being developed very large.

When our company obtained its charter from the State of Kentucky the rivers named in the charter, over which we assumed control, were in a very bad condition, even worse, if possible, than was the Kentucky River when it passed under the control of the National Government; that is to say, all the locks and dams were, in a manner, gone to ruin; parts of several dams had washed out, and *all* had to be rebuilt. Indeed, the cost to our company to rebuild the old work was almost as great as it would have been to erect entirely new ones, the cost so far exceeding $300,000.

We now have the locks and dams in good condition; in fact, we think that they will require very small additional expense during the fourteen years yet remaining to us under our charter. Considering this fact, and the further one that the carrying trade of our line is rapidly increasing, we regard our franchise as more valuable to us now than at any time since the State gave us control of the rivers. We anticipate larger profits and smaller outlay than during the past years of our existence as a corporation. If the United States should assume control of these rivers, the Government will come into possession of a valuable property, requiring not a tithe of the appropriations bestowed upon lines of less importance to keep it in good repair, and render the Green and Barren rivers free navigable streams, thus going far to develop a very wealthy section of country.

In conclusion, after reciting all the foregoing facts, it is the opinion of our company that the franchise bestowed upon us by the State of Kentucky is worth to us, at a low estimate, $400,000, and for that sum we will part with it, and transfer all our rights and privileges to collect tolls to the United States.

In submitting your final report to the Secretary of War, should you deem it advisable to recommend the transfer of these rivers to the control of the General Government, I wish to assure you that any information in the power of this company to give will be cheerfully communicated to the proper authorities; and should you require additional data to enable you to complete your report, you have but to intimate to me your desires, and I will gladly comply with your request, if in my power.

Very respectfully, your obedient servant,

C. G. SMALLHOUSE,
President.

Capt. JAMES C. POST,
United States Engineers.

BOWLING GREEN, KY., *January* 2, 1885.

DEAR SIR: I am in receipt of your letter of 31st ultimo, in which you ask for a more explicit statement of the proposition made by me in a former letter of this company to transfer to the General Government the rights granted to it by the State of Kentucky to charge tolls for the navigation of Green and Barren rivers. The proposition made by me was intended not only to convey the right to collect tolls, but also whatever claims this company might have by reason of its charter upon any of the property conveyed to it by State authority in granting the franchise. To be explicit: For the sum of $400,000 this company will transfer to the United States all its rights and privileges to collect tolls upon Green and Barren rivers, and will convey whatever claim it may have in the property acquired by its charter from the State to the General Government, so that in so far as this company is concerned the United States shall have entire control of the locks and dams on said rivers, together with the lands and lock-houses belonging to the State of Kentucky, and all other property necessarily belonging to and constituting a part of the property conveyed to this company by the State. In this connection permit me to call your attention again to the fact that at the time this company assumed control of these rivers the locks and dams were in very bad condition, and that an expenditure almost equal to the amount now asked of the United States has been necessary to place the rivers in the condition you have recently found them. In reply to your inquiry, "What structures, if any, have been erected by private individuals or companies upon the lands of the State, &c.," at Brown's Lock there is a flouring-mill; at Woodbury, a saw-mill, grist-mill, and carding-machine; at Calhoun, a flouring and saw-mill; and on the Rumsey side, at the same locks is a flouring-mill and woolen-mill. All these structures are erected upon lands belonging to the State, and adjoining the locks and dams.

The leases were originally given by the State, and were continued by this company when it assumed control, and have until the expiration of time named in our charter to run; the leases also embrace water-power. No other structures have been erected by private individuals or corporations, and no other leases for water-power at the several dams exist. Of course, all rents accruing from those named would inure to the benefit of the United States should the Government assume control of the rivers.

As to the value of commerce on these rivers, I can only give an estimate based upon the business of this company. During the year 1883 there was received in tolls $11,955.21, and for the first nine months in 1884, $7,897.76 for vessels other than those belonging to this company. We estimate the business done by this company to be about four-fifths of the commerce of the rivers. Our boats carry in the neighborhood of 50,000 tons of freight annually. The coal output will aggregate 70,000 tons, and the lumber interest will approximate 200,000,000 feet, counting the sawed lumber and logs rafted out of the river. It is estimated that 6,000 hogsheads of tobacco are shipped to market from counties adjacent to the rivers, and depending upon them for transportation facilities. With a large trade in staves, hoop-poles, tan-bark, and stone added to the figures I have given, I would estimate the total value of the commerce of Green and Barren rivers per annum at about $6,000,000; more probably above than below that amount. This does not represent the resources of the section of country to be benefitted. The one item of coal, with a present output of 70,000 tons, could be increased sevenfold, and the timber product is inexhaustible. In the counties adjacent to this line of navigation it is safe to assert 50,000,000 pounds of tobacco are annually grown, and fully one-half of that amount would go to market by way of these rivers were they made free and thus afford cheaper transportation. Estimating our receipts from tolls at $10,000 annually, and supposing that to represent one-fifth of the tonnage passing through the locks, our own vessels constituting four-fifths, it will be seen that lockage fees alone constitute a tax of $50,000 per annum upon the commerce of the rivers. Indeed, upon a careful estimate, the lockage upon our own boats and barges last year, if compelled to pay at schedule rates, would amount to $51,000. Of course there is a great deal of stuff passes our locks over the dams in high water upon which we collect no tolls, and is not included in the estimate I have given you. This estimate is based upon such data as I have at command, and while possibly not accurate, yet may serve to afford you an idea of the value of these rivers as navigable waters. If you should desire more specific information, I do not know from what source it can be procured. I believe my figures will approximate the true values.

Would it be asking too much to request you to advise me at what time your report will be submitted to the Secretary of War?

I am, very respectfully, &c.,

C. G. SMALLHOUSE,
President.

Capt. JAMES C. POST,
United States Engineers.

LETTER OF THE PRESIDENT OF THE GREEN AND BARREN RIVER NAVIGATION COMPANY.

GREEN AND BARREN RIVER NAVIGATION COMPANY,
Bowling Green, Ky., March 8, 1886.

DEAR SIR: Your favor of 20th ultimo, transmitting copy of a resolution of the United States House of Representatives, directing the Secretary of War to ascertain and report upon what terms the franchise and property of this company can be obtained and transferred to the United States, and requesting me to inform you whether or not the company which I represent wishes to modify the proposition it made in my letter to you, dated November 27, 1884, and, if so, what changes it desires to make, has been received. My reply has been delayed until proper action could be taken by the company.

I am directed by the shareholders to say, in reply to the resolution of Congress, that this company is disposed to meet the Government in the matter referred to in a spirit of exact fairness and in a business-like manner, precisely as it would an individual or corporation having the same end in view. The business of our company is entirely satisfactory to its shareholders, and its prospects for increased earnings are most flattering.

The proposition submitted to the Government on the 27th of November, 1884, was based upon a careful calculation of the present worth of our franchise at that time, taking our net earnings for 1884 as the standard, and not reckoning upon an increase of profit, which, I felt sure, would certainly result, and my predictions were fully verified in our business for the year just closed; during 1885 the profits of the company were larger than during the preceding year by several thousand dollars. In this connection it is proper for me to state that the members of our company in consenting to a transfer of its franchise to the Government, are actuated by the interest they feel in the development of the section of country through which these rivers flow, and the immeasurable benefits to accrue to the commerce of the States by the opening of its vast resources of coal, iron, stone, and timber to the markets of the whole country. As an investment, our shareholders believe that larger profits can be realized from the business of the company during the years yet remaining of our charter than could be obtained from the investment of the sum named in its former proposition to the Government, in any other business, and we have excellent reasons for the faith which is in us. It is perhaps well for me to give them. A very important one, and which should be taken into consideration by the Government in its estimate of the value of our franchise, is this: When the State of Kentucky transferred these rivers to our control the locks and dams and all the public works connected therewith were in very bad condition; for several years the necessary repairs of the works consumed the capital and earnings of the company. All the improvements and repairs made by us were of a substantial nature and made with a view to their lasting until the expiration of our charter. Large expenditures have been made which would have been unnecessary for the conduct of our business had we anticipated the possible transfer of the rivers to the United States at this time. Should we now convey our franchise to the Government all this expenditure will be a practical loss to the company, and the Government will derive the benefit of the improvements which were designed to facilitate the business of this company during the remainder of its chartered existence. Under the conditions of our charter we are required to return the works to the State in as good condition as we found them; to do this would entail not another dollar's expense to this company unless in the event of some unforeseen and improbable misfortune. Consequently our net earnings must of necessity be larger in the future than in the past years of our existence, our only expense being actual operating expenses, which are small, as shown in my letter of January 2, 1885, to you.

The examination of the works on these rivers, made under your supervision in 1884, the result of which was embraced in your subsequent report to the Hon. Secretary of War, discovered them in good condition and requiring but little expense to maintain them in good repair. Notwithstanding this fact, our company expended a great deal of money last year putting in new gates, improving the locks, repairing the dams, and dredging the channels. These expenditures must enter very largely into any estimate of the value of our franchise. Aside from largely decreased expenditures for construction and repairs, we have abundant reason to predict an increased volume of business and consequent increase of earnings. So far as the limited capital of this company would permit it has endeavored to foster and build up the commercial, mining, and agricultural interests of the section of country depending upon us for transportation. Our capacity to do so has been limited, but we have reason to be well satisfied with the returns received for all our efforts in that direction, and we confidently predict larger returns in the future should we continue in our control of the rivers. This somewhat extended outline will serve to explain to Congress the facts upon which this company bases its proposition to the Government and the means by which we are enabled to arrive at an estimate of its value.

In your letter of the 27th ultimo, the receipt of which is also hereby acknowledged, you ask me to give you such information, in addition to that contained in my letter of January 2, 1885, as I may have concerning the carrying trade of this company, the cost of the same, the profits, and also the advantages likely to be gained by the commerce of the country by the free navigation of these rivers. So far as the carrying trade of this company is concerned, the statements contained in my letters of November 27, 1884, and January 2, 1885, which were made a part of your report to Secretary of War in February, 1885, embrace all the information of which I am now possessed, except that my prediction in those letters of an increased business was fully verified during the past year. Assuming our profits for 1885 as the standard, and estimating the present worth of our franchise for the remaining years of our charter at the rate paid by the Government as interest on its bonds, the value of our property will exceed the estimate given in your report a year ago. The cost of our transportation was very nearly approximated in my letters already referred to, and upon that point I can give you no estimate which would enable you to approximate it more closely.

The relation of the commerce of these rivers to the general commerce of the whole country is the prime question which must enter into the consideration of this matter by Congress. This, of course, can only be approximated, as I have no reliable statistics upon which to base anything like a positive statement. As near as I can arrive at the real facts, the extent of the country immediately dependent upon these rivers for facilities of transportation is about 10,000 square miles. This vast extent of country is possessed of coal and iron deposits which, if developed under favorable auspices, would make it one of the wealthiest and most populous sections of our country. The State geologist of Kentucky, in his reports upon the mineral resources of this section, gives them a place among the very richest found anywhere in the States, and predicts a prosperous future should proper facilities be offered for the development and transportation of the products of this region. I can see no reason why the coal-fields of the Green River area may not be made to contribute very largely to the commerce of the entire Lower Ohio and Mississippi valleys and supply fuel to the inhabitants of that vast area at a much less cost than now prevails by reason of the transportation of the necessary supply from the coal-fields of Pennsylvania; nor is there any reason why the iron interests of the Green and Nolin river districts, if developed under as favorable auspices and with as much encouragement from the General Government as shown to the same interests elsewhere, should not equal in wealth and importance the richest sections of our country engaged in the manufacture of this leading commodity in the commerce of the nation. For a detailed statement of the mineral resources of this section and their relation to general commerce, I respectfully refer you to Hon. John R. Procter, State geologist, Frankfort, Ky., and also to the report of Maj. W. E. Merrill, on Green and Barren rivers, Kentucky, to the Secretary of War in 1880.

The foregoing embraces what information I have and which you ask for to enable you to comply with the resolution of Congress. From the considerations which I have recited, and by direction of the company which I represent, I beg to inform you that the proposition contained in my letter of November 27, 1884, contains the terms upon which we will convey to the United States our franchise and all property conveyed to us by the State of Kentucky as described in our charter. This proposition is modified, however, in this respect: One year having elapsed between the submitting of the proposition and the expiration of our charter, a reduction of the amount named in the said proposition for the time which has elapsed is deemed just. We will, therefore, convey to the Government our franchise and property above described for that proportion of $400,000 which the time yet to elapse prior to the expiration of our charter bears to the time which was to elapse when the original proposition was made.

As stated in the beginning of this letter, my company desires to meet the Government in this matter in a spirit of fairness; it asks not $1 more for its franchise than is just and right for it to receive. The price we have named is in accordance with our estimate of the value of our property, but we are willing to submit to an investigation on the part of the Government of our business and all matters bearing upon this question. With this in view, I now extend to you or such other person as may be designated by proper authority an invitation to visit our offices in this city and fully examine into and concerning this matter. The books, papers, and employés of the company shall be at your disposal, and every facility possessed by us at your command, in order that the Government may be fully advised and arrive at an intelligent conclusion of the value of the property over which it proposes to assume control. I not only invite you but would respectfully urge you to adopt this course. In the event you conclude to do so, please advise me of your coming.

Very respectfully,

C. G. SMALLHOUSE,
President.

Capt. JAS. C. POST,
United States Engineers.

LOUISVILLE, *November* 18, 1886.

DEAR SIR: If the claim of Green River to the care of the Government as a public avenue rested on nothing but the expressive fact that at one period in our civil war the slackwater navigation served as a valuable channel of supplies for a Union army at a critical moment when all other lines failed, the question might properly be dismissed. But the ordinary trade of the Green River country has been relatively large from its earliest settlement, and the magnitude of its undeveloped resources, especially in minerals, demands for it the facilities of an extended interstate commerce. It is impossible to localize the interest of a large coal and iron production, such as the Green River Valley is capable of. The present interests of the country, exclusive of its very large supply of timber, are chiefly agricultural; but the ordinary productions of the farm, in the way of provisions and forage, cannot afford on Green River the expensive transporatation to which they are subjected, and there is, therefore, little encouragement to a surplus production. The tobacco crop, however, is quite noted, and to a large amount finds a market in the original packages in foreign countries, though of course it suffers the drawback of costly transportation also.

To the importance of the interests to be subserved by the improvement of the navigation it is to be added that the extent of the watershed of the valley, the gentleness of the river slope, and the great depth of water between the few distant points which at once identify themselves as the proper sites for river improvements, give to this stream a character and value for navigation not possessed by any other of the same capacity—or even of much greater size—of which I have any knowledge. The average breadth of the river in the three lower pools is about 150 yards, and the depth varies from 20 to 30 feet at low water, with very steep banks. Five dams, as far as their imperfect construction can permit, already afford a reliable navigation at all seasons for a distance of 185 miles, from the Ohio to Bowling Green. At the latter point it connects with a great through north and south railroad line. The lower pool is 60 miles long, and the next two are about 40 miles each. Torrent-like floods are unknown, and an obstruction of the navigation by ice, in the lower pools especially, is so rare, inconsiderable, and temporary as not to be regarded as an occurrence to be contemplated. The facility which is afforded at every point by the abrupt banks and deep water for loading the coal into barges, and the security that is given to the necessary dock appliances for loading, and to the boats and river improvements by the peculiar character of the stream, present advantages which weigh materially in a comparison with other localities. On the Ohio and Monongahela, for example, the loading of barges is suspended in the season of ice, and boats and cargoes are in great jeopardy. On Green River there is no delay and no danger, nor is the advantage confined to the season of ice, or the period of loading. The following slip, taken from a morning paper, affords a not unusual illustration of the sacrifices to which coal shipments are subjected in struggling with the 800 miles of difficult and dangerous navigation between the mouth of the Monongahela and the mouth of the Green River, even at this season of the year:

"THE COAL FLEET HAVING TROUBLE.

"[Special to the Courier-Journal.]

"PITTSBURGH, *November* 16.—Several additional accidents to those reported have happened to the coal fleet. The Joe Walton stuck her entire tow at Logstown, got five barges off, but has abandoned her trip. The John P. Case grounded four barges at Montgomery. The Tom Lysle sunk two fuel boats at Logstown. The Seven Sons sunk a barge about a mile below Bellaire. The Belle McGowan sunk two barges at Powhatan. The Ella is reported aground at Carpenter. The Annie Roberts, Lioness, Nellie Speer, and Dauntless, laid up at or near Parkersburg with their tows of coal since August, left there today. Total coal shipments on recent rise: For Cincinnati, 1,993,000 bushels; for Louisville, 1,307,000 bushels—making a total of 3,330,000 bushels."

You have properly judged the proposition for the assumption of the control of the navigation by the Government to involve three preliminary questions, on which I will offer some suggestions, in the order in which you have named them in your letter:

(1) "The commercial importance of the Green and Barren rivers and tributary country." I have already alluded to that question in a general way. The present commerce of Green River is by no means unimportant, but only a consideration of the natural capabilities of the country, especially its mineral resources, can lead to a just conclusion on that point. That with a properly improved navigation the valley will rapidly fill up with capital, and become the scene of a large mineral production, may be regarded as an assured fact, upon which my own experience and observation enable me to speak confidently. Everywhere the consumption of coal is constantly growing. The Lower Mississippi is one of the great markets, and now draws its supply chiefly from Pitts-

burgh. Green River is 800 miles nearer to it than Pittsburgh is. To-day Green River could find a market there as fast as she could supply it. No coal-producer on Green River has ever had any difficulty in selling coal by the side of Pittsburgh when he could get to market. With the increasing demand for coal on land routes which center at Pittsburgh, it is to be expected that the Falls of the Ohio will, after a while, become the farthest southern limit which the Pittsburgh supply will find it desirable to seek for general purposes. No other field has such advantages as Green River for taking a prominent place in the lower market, and that place she will surely occupy. I do not here go into particulars to prove her ability to fill it. The geological reports of Kentucky and the mining operations now and formerly in force in the Green River coal basin give ample assurance on that point. The report of Colonel Merrill, U. S. Engineers, published by Congress in 1879, presents, as you will have observed, a good deal of such information. The mineral resources of the Green River Valley are not an unexplored or practically untried question, though they are indeed an unjustly fettered source of wealth.

(2) "The value to the United States of the existing locks and dams, considered in connection with such general system of improvement as may be justified by the interests involved." That value is not very great; it may in fact be said to be very small, for the reason that the works are not such as the Government would construct, and not such as the interest of the country which they are intended to serve demands. They are comparatively inexpensive in construction, and one of them at least is understood to be in a bad condition. I refer particularly to the Rumsey Lock. They were designed to give a minimum water depth of 4 feet, but by the highest of the approaches to the locks there is at the first two probably not more than 3 feet at low water. For the profitable shipment of coal there ought to be not less than 7 feet. With such a navigation, coal fleets would gather at the first lock, and be ready to take advantage of every navigable stage in the Ohio. The present locks are 36 by 145 feet, admitting only one ordinary coal barge at a time. For any considerable shipping business in coal, a capacity to pass at least 4 barges at a time would be required. With an increased depth of water, the present locks might satisfy the demands of business for 10 years, and they would still be useful, if the walls are firm enough to withstand the pressure of the increased water head; but as the business increased larger locks would be necessary, and it so happens, in consequence of the faulty location of the old locks, that the new ones would be properly placed on the opposite side of the river. The navigation would not, therefore, have to be suspended during their construction. This future enlargement of the area of the locks would not for an indefinite period be required at any but the two lower dams, the chief coal deposit being in the second pool, and virtually none in the fourth pool. The considerations above mentioned would warrant the Government in attaching some value to the present improvements. Perhaps $200,000 would be a sufficient estimate of that value, which should be determined not by their actual cost, or by the makeshift profit that might be tortured out of them by private speculation, but by their utility in the system of improvements which the Government would be expected to adopt. It will be perceived, also, that this value has nothing to do with any question of compensation to be made to the lessees for the relinquishment of their charter. It constitutes a part of the transfer freely made by the State to the General Government for the purpose of internal improvement.

(3) "The value to the Green and Barren River Navigation Company of their lease or franchise," which now has a little more than eleven years to run. This is the sole question to be considered in treating with the company for the termination of its tenure. The company alone knows with certainty how much it is receiving from the operation of its charter, and how much of that is profit; but it is not necessarily the best judge nor the most impartial witness of the effect which may be produced upon its profits by causes at present in operation, or likely to arise in the future; nor by contingencies that may affect its accountability at the termination of its lease. It would seem from the terms of the charter that the latter consideration need not amount to much; but if an unwonted zeal for the rights of the public should prevail in public places when the navigation reverts to the people, the company might find itself held to an inconvenient responsibility. I have no doubt that the river business has declined, and that it will continue to decline under the present management. Owing chiefly to the operations of the monopoly, there has been for eighteen years practically no improvement of the country tributary to the river, except under the influence of the railroads, and in some respects there has been depreciation. The carrying trade on the river must be a good deal less than it was at the advent of the company. Two railroads now cross the river between Bowling Green and the Ohio, and draw largely from its business. The public sentiment is hostile to the monopoly, which is therefore deserted by the people whenever they are not absolutely at its mercy, unless under concessions which leave the company with greatly reduced profits. An increase in this competition from railroads is cer-

tain to occur, and is an important factor to be considered in the company's valuation. Just now a branch has been completed from the Owensboro and Nashville Railroad to an important coal mine from which the Navigation Company has been drawing. This new connection will undoubtedly impair the value of the company's coal trade at Bowling Green, which heretofore has suffered serious damage. One contingency especially, which is probable in the highest degree, should be entered in the account.

The original charter only allowed toll on boats passing the locks. About the year 1876 an attempt was made to establish an independent packet in the second pool, and light flat-boats also were used by the people to connect with the railroads. To defeat this threatening diversion the company procured an amendment authorizing it to collect toll from boats plying only in the pools. That practically interdicted all connection between the railroads and the river, except through the company's packets. Whatever may be said of the decisions in the State courts sustaining the original charter, there can be no constitutional obstacle to a repeal of the amendment, and that I believe the people will demand. The effect would be to authorize the establishment of an independent packet in each pool. The second pool is already crossed by two roads. A branch of about twelve miles would connect one of them with the first pool, and a branch of about six miles would connect the other with the third pool. The fourth pool by paying toll at one lock would have an outlet through the third pool, or through the fifth pool and the Louisville and Nashville road at Bowling Green. The competition thus established would materially impair the value of the company's franchise.

Still another fact is relevant in considering the value to the lessees. The Navigation Company is located at Bowling Green, with dock-yards, storehouses, and valuable landing privileges, and may properly be regarded as permanently and professionally concerned in the steamboat business on Green River. A change in the management which would relieve it from responsibility, improve the navigation, and promote the prosperity of the country, would largely compensate for the relinquishment of any profit the company now derives from an odious position with reference to the public.

In my opinion $100,000 would be an ample compensation to the company for the surrender of its charter at this time, and it might act wisely in accepting $50,000. It is understood to ask $350,000. An error in its estimate of profits or in its classification of them is extremely probable. The account is a complicated and contingent one. The income of the company is derived partly from tolls on rafts and floating boats, partly from its packet business, partly from its coal trade, and perhaps somewhat from other speculative engagements. Only the first of these items belongs necessarily to its charter, though it is of course benefitted in the others by its monopoly of the navigation. All of them are liable to serious disturbance. Even the first depends on the extent to which rafts may be compelled to go through the locks for the want of water to pass over the dams; for though the charter amendment allows the company to charge toll in the latter case, as well as in the former, yet the raftsmen resist the demand, and the tolls are not collected. It is possible that the company's valuation may be based partly on this unavailable asset.

The debit side of the account consists in the expense of keeping up the navigation, the maintenance and running expenses of steamboats, barges, coal-mines, coal-yards, &c., and the wear and tear and loss of perishable property.

A contingent allowance must be made for all of these items, even after the closest calculation. And after all it would be difficult to decide what portion of the net profit ought to be credited to the company's franchise, and what to ordinary business methods.

Very respectfully, your obedient servant,

D. C. BUELL.

Maj. ALEXANDER MACKENZIE, U. S. A.,
Secretary Board of Engineers.

EVANSVILLE, INDIANA, *October* 30, 1886.

DEAR SIR: In accordance with the request of Col. James C. Duane in his circular of September 23, 1886, asking for information in relation to the locks and dams on Green and Barren rivers, in the State of Kentucky, that are now in possession of the Green and Barren River Navigation Company, and concerning the value of the franchise of said company and the commercial importance of said rivers, I beg leave to make the following report:

The many letters sent you by our most substantial merchants establish, beyond a doubt in my mind, the commercial importance of the Green and Barren rivers; but, in order to give a few figures as well as facts, I have, with considerable trouble, been able to furnish the following statement, which statement is made from a careful estimate:

COMMERCIAL STATISTICS.

Shipments of merchandise from Evansville, Ind., to Green and Barren River country, annually	$1,507,000
Shipments of tobacco from that country, annually	1,000,000
Stock, staves, and hoop-poles from that country, annually	200,000
	$2,707,000
Floated out:	
500,000 saw-logs, worth $5 each	$2,500,000
Lumber, stone, and coal	50,000
Total	$5,257,000

In making the above statement I have been aided by our best merchants. We have done our best to get as near to the actual facts as possible.

In regard to the value of the locks and dams on Green and Barren rivers, I wish to say that I have been familiar with them for over 30 years. I was steamboating on those rivers in 1855, 1856, 1857, 1858, 1859, 1860, 1861, 1866, 1867, and 1868. During these years the works were operated by the State of Kentucky. Neither the locks nor dams were kept in good order. The dams leaked badly, making the water shallow in the chutes leading to the locks. The lock-gates also leaked badly, sometimes so badly that it was as much as we could do to get far enough into the lock-pit to close the gates behind us. The chutes were allowed to fill with sediment, until it was with difficulty that we could get through them with anything like a good trip. Oftentimes we have remained in the chutes for two or three days at a time when, if the chutes had been dredged to their original depth, we would have had water enough.

I was running my own boat in 1868 in those rivers. The works were put under the control of the Green and Barren River Navigation Company during that year. I knew nothing of the transaction until all arrangements had been completed and the company was in possession. Knowing that I could not run my boat under the tolls allowed to be charged by the company, I sold her and retired from the trade. Since that company has had possession of the works, it has put the locks and dams in good order. Only a few weeks ago I made a trip up those rivers and found the river, the chutes and the works in good order. The chutes have been dredged, the dams overhauled, and some of them almost made new. The locks and gates were and are in better order than I ever knew them to be in. There are five locks and five dams. I should say that they are worth $500,000. In my judgment, they are sufficient for many years to come. The locks are 36 by 150 feet—sufficient for a large-sized coal boat—not quite large enough to handle rafts of logs rapidly; but if the people could get the rivers free they would be satisfied with the works. What they, of the Green River country, and we, of this city, want most is to be relieved of the monopoly now fastened upon those rivers.

Every shipper and traveler is at the mercy of the company. There is no competition in the carrying business.

Oftentimes the tonnage is inadequate to the demands of commerce. Passengers at certain seasons of the year are often overcrowded. Sometimes they fail to get passage, and have to get home as best they can (this is during rafting season, and when the raftsmen are returning home).

Many of our merchants have told you that there is a great abundance of timber, coal, iron, and stone along those rivers, and yet, save timber, nothing of consequence is being brought out. No money of consequence is being invested there. None will be invested so long as those streams are in the hands of a monopoly. Tobacco stemmeries along Green River, which were built by New York companies before the navigation company got control of the river, are rotting down. They have not been used for years. Mr. R. H. Arkenburgh, a large tobacco-dealer of New York, who has several tobacco houses on Green River, told me a few years ago that he regarded his property on that river as worthless. Messrs. Fattman & Co., large tobacco-dealers of New York, have a large stemmery on Green River, built before the company took control of the river, and which cost $10,000. It has not been used for years. I saw it a few weeks ago. It is still standing, but the shingles have rotted off, and I regard it as worthless. At this stemmery I have, in days gone by, taken on my boat 100 hogsheads of tobacco at one time. These are facts, known to be facts of my own knowledge.

The Green and Barren rivers are not of quite as much importance as they were before any railroad was built near them; neither is the Mississippi, the Ohio, and many other important rivers. Green River is as little affected by railroads as any stream that I know of. Two roads cross it, but there are very few people on Green River who are not dependent upon the river for their trade and traffic.

We of this city are deeply interested in this matter. The Green River country is deeply interested.

Make the Green and Barren rivers free, and we think that new life will be infused into the Green River country. New buildings for handling tobacco will go up, manufactories will be established, her fine coal will be floated to market, timber will come out in greater quantities, and all things will be better.

Very truly, &c.,

A. H. EDWARDS.

Maj. ALEXANDER MACKENZIE,
Corps of Engineers, U. S. A.

APPENDIX 2.

COMMERCIAL IMPORTANCE OF THE WORKS OF IMPROVEMENT ON GREEN AND BARREN RIVERS, CONSTRUCTED BY THE STATE OF KENTUCKY AND NOW CONTROLLED BY THE GREEN AND BARREN RIVER NAVIGATION COMPANY.

The locks and dams which constitute the works here referred to are owned by the State of Kentucky, and were built for the purpose of making the Green and Barren rivers navigable for boats of limited capacity at all seasons of the year, which result was fully accomplished. The Green River, of which the Barren is a tributary, empties into the Ohio near Evansville, Ind., and connecting as they do their contiguous territory with the markets of the country, become of national importance. The commercial importance of the works (necessary additions and improvements being considered), is identical with that of the country drained by these rivers and their branches. At the present time the works are held, under a lease from the State of Kentucky, by the Green and Barren River Navigation Company, a private corporation which is authorized by law to impose a heavy tax on all products moved on the river. This tax and the control of the river itself naturally act as a bar to the development of the resources of the country, and it would seem proper in considering the question of commercial importance to look especially to the results which the works might accomplish if they were free as in the case of other rivers the improvement of which has been carried out by the General Government.

The present slack-water improvement extends to Bowling Green, on the Big Barren River, a short distance above its junction with the Green. The water-shed of the Green and its tributaries is nearly 10,000 miles in extent; and it is claimed that practically one-half of this area lies above the effect of the present slack-water navigation. A survey and report on the upper portion of these rivers, with estimates of improvement, were made by Lieutenant-Colonel Merrill in 1880.

In considering the commercial possibilities the extension of the present system, which will bring into the limits of the improvement all the region tributary to the rivers, should be taken into account; and in the same connection it appears proper to embrace results which might follow such proper additions to and enlargement of existing works as will reduce cost of transportation to a minimum.

The country through which the Green and Barren rivers run is rich in minerals, and hard-wood timber and agricultural products especially tobacco can be raised in abundance; but the mining interests are dormant and the agricultural resources are only partially developed. Some coal from the company's mines is taken to Bowling Green, and some from a mine near the mouth of the river, below the slack-water improvement, finds its way into the Ohio.

Tobacco, grain, and general supplies form the principal cargoes of the company's steamboats. Hard-wood logs and lumber, staves, and hoop-poles are taken out of the river in large quantities, going principally to Evansville, which claims to be the largest hard-wood lumber market in the world.

A careful estimate of the present annual business of the Green and Barren rivers, prepared by Mr. Edwards, of Evansville, is as follows:

Merchandise shipped from Evansville to Green and Barren rivers	$1,507,000
Shipments of tobacco from the river	1,000,000
Stock, stores, and hoop-poles	200,000
Saw-logs, 500,000, at $5 each	2,500,000
Lumber, stone, and coal	50,000
Total value of products	5,257,000

This estimate does not apparently include the local traffic on the rivers. The value of existing commerce was, in 1885, estimated by the president of the navigation company at $6,000,000.

The commercial statistics of Kentucky River, as published in reports of the Chief of Engineers, show a volume of business, amounting in 1883 to about $3,937,000, in 1884 to $5,013,000, and in 1885 to $5,358,000. The increase is attributed to the improvements made by the United States. The Government has already appropriated for the improvement of the Kentucky, and the consequent development of its resources, nearly $1,000,000. The great natural advantages of the Green and Barren rivers as navigable streams, and the relative importance of the tributary country, would appear to entitle these streams to at least as much consideration as has been given to the Kentucky and other streams emptying into the Ohio.

In regard to the Great Kanawha, in the improvement of which the Government has already expended nearly $2,000,000, Colonel Craighill in his report for 1885 says:

"As the improvement of the river has progressed the commerce on it, notably the shipment of coal, has greatly increased. * * * The full advantage of the improvement cannot be realized until it is complete."

For the improvement of the Cumberland, the reported river commerce of which is no greater than that of the Green and Barren, there has been appropriated by the General Government about $800,000.

The amount of the future increase of commerce of the Green and Barren, which would doubtless follow the removal of the existing obstructive tax and the extension of the system of improvement as far as justified by the interests involved. cannot be definitely given, but the resources of the country are very great, and their full development would seem wise and desirable. The natural products, which can be obtained in almost unlimited quantities from the Green and Barren River district, such as coal, iron, hardwood, lumber, &c., are needed, and would find ready markets in the Mississippi Valley; and, owing to location and surrounding circumstances, would, it is claimed, reach their markets at much less cost and with less interruption from ice, low water, &c., than those from other sections of the country upon which dependence is now placed. Such conditions must result in reduction of cost to the consumer and consequent benefit to the general public.

The following quotations, from letters published in previous reports in regard to these rivers, afford important information:

[From General D. C. Buell.]

As to productions, it may be said that no large part of the country drained by Green River and its tributaries is actually poor in an agricultural sense. Much the largest part of it is extremely rich, comprising some of the best lands in Kentucky. All of the cereals grow well everywhere, but the want of cheap transportation limits the production in many cases to what the people require for their own use. On Lower Green River the principal reported crop is tobacco, for which both in quantity and quality the country has a wide reputation. The quantity of timber of various kinds, oak, hickory, walnut, ash, poplar, elm, &c., sent annually out of Green River is very large. But it is the mineral resources of a considerable portion of the country, substances which in some form seek a market in other States and in distant places, that should give to Green River the character of a national channel of trade, and entitle it as such specially to the care of the General Government. For a distance of about 140 miles by its windings the river cuts through one of the most remarkable coal basins in our country, affording many beds of fine bituminous coal, whose natural market in its crude form is the Mississippi River, from Cairo to the Gulf. Within this basin, too, and upon its borders, are to be found abundant deposits of iron ores of various grades, which in connection with the adjacent coal, offer a most attractive field for the manufacture of iron. The banks of Green River also afford inexhaustible quantities of building stones of different sorts; sandstone and limestone of very fine quality, for which there is already a considerable demand on the Ohio. These are articles of trade that require a cheap and abundant means of transportation, for which Green River affords a natural basis, the superior of which cannot be imagined.

* * * * * * *

You are aware that Green River and the Big Barren were some forty years ago improved by the State, so as to afford a slack-water navigation from the Ohio to Bowling Green, a distance of 185 miles.

* * * * * * *

The improvements have served the purpose for which they were designed, an ordinary shipping business, but do not offer depth of water enough, or capacity enough, for

the method which has since come into use of shipping coal and other heavy and bulky substances, in immense quantities, by means of large barges and towboats. * * *

[From Prof. N. S. Shaler.]

The task of the western party of the survey for this year has been to determine the character of the deposits of coal and iron in the easternmost part of the Green River coal-field.

So far our efforts have been richly rewarded. In the section where our work has hitherto lain, in the territory between Bear Creek and Nolin River, and for a certain distance to the east and west of those streams, we have determined the position and character of sources of supply for furnaces and coal-mines unexcelled by any in the State. At least two veins of workable coal, of good quality for steam purposes, and sufficient thickness for profitable working, have been satisfactorily determined.

One of these veins is 4 feet in thickness; seems to carry its thickness well; is admirably disposed for drainage; and could be mined as cheap as any coal in Kentucky. Analysis seems to show that it will answer well for making coke suitable for iron smelting.

The point of most interest, however, is the rich and extensive series of ore beds which have rewarded our search. Not less than five different beds appear at various points in the heights of the hills. Of these, one, a bed of 3 to 5 feet, or more, in thickness, of oolitic ore, contains about 37 per cent. of iron, in a very favorable combination for making metal of good quality. This bed has already been traced over an area of about 20 square miles, and will in itself furnish ore for fifty furnaces for centuries to come. Two other ores promise good results, though, owing to the densely-wooded condition of the country, we have not been able to trace them out the whole area as well as the overlying oolitic ore.

The timber in this section is of excellent quality for the uses of the miner and ironworker. There is an abundance of wood suitable for charcoal and for the supports of mines, &c. Limestone, of excellent quality for furnace use, is found at the base of the hills; and stone suitable for the masonry of furnaces can be had at every point.

I am thoroughly satisfied that this region is full of promise, and that it only wants capital and energy to give it development. With the revival of the iron industry from the late panic—a restoration which seems just at hand—I am confident that this region will come to the knowledge of the world.

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Here is a noble river, with unfailing water-power, and with 4,000 square miles of the best coal and iron in the West, a good soil, noble forests of manufacturing woods, and a good climate.

THE NOLIN RIVER DISTRICT.

In Edmondson and Grayson Counties, north of Green River, between Nolin River and Bear Creek, is an area of considerable size, called the Nolin River district. The ores of this region are stratified carbonates and limonites, found near the base of the coal measures. The ore of most value occurs above the conglomerate. It is about 4 feet thick, and, so far as present developments indicate, underlies an area of large extent. It is almost wholly undeveloped. A number of years since a small charcoal furnace was established on the Nolin River, but it was so far from market, and transportation of the iron was so expensive, that the enterprise soon failed. It ran long enough, however, to establish the fact that an excellent iron could be made from these ores.

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In addition to the great amount of timber available for charcoal, stone coal occurs in the same region. This coal is the lowest of the series, and is of most excellent quality, analysis showing it to be far superior to the higher coals of Western Kentucky, which are the ones most generally mined. The region is now more accessible than formerly, as it lies within 15 miles of the Louisville, Paducah, and Southwestern Railroad, but the lack of transportation facilities directly to it has prevented its development.

The aggregate amount of ore, coal, and timber suitable for charcoal in this region is immense and offers great opportunities for development. It is one of the most richly endowed undeveloped iron regions of the State.

In many other localities in the western coal-field iron ores have been found, but they have not been thoroughly prospected and little is known of their extent. One of the best known localities of this sort is in Muhlenburg County. In this county are found, at Airdrie Furnace, on Green River, and at Buckner Furnace, near Greenville, deposits of so called black-band iron ore, a ferruginous bituminous shale, yielding about 30 per

cent. of iron. At Airdrie Furnace this coal rests immediately above an excellent coking coal, and the two can be mined together very cheaply.

At this place iron can be produced very cheaply by bringing ore from the Cumberland River region and using it in admixture with the native ore.

* * * * * * *

[From General James A. Dawson.]

The country within the influence of, and which will be benefited by, the proposed extension of navigation on the Green and Barren rivers, embraces the counties of Warren, Allen, Barren, Monroe, Metcalf, Green, Adair, and Edmonson, comprising an area of fully 5,000 square miles. This area contains a large part of the finest farming land on the State. It is pre-eminently the tobacco belt, in which is grown a larger quantity if that staple than in any other section of the Union, embracing all grades from the finest bright wrapper to the heaviest shipping leaf. It is in some respects a peculiar region, being, as it were, a valley on the summit of a plateau.

Muldraugh's Hill, a spur from the Cumberand Mountains, extends to the Ohio River, near the mouth of Salt River, and rises to the height of 600 feet above the water-level of the Ohio at the mouth of the Green, and has been not inaptly styled a range of hills with but one face. Upon the top of this hill, in Hardin and Marion counties, stretches out southwardly, for the distance of more than 100 miles, a table land, on which is situated the Green River Valley, including the counties before mentioned, and the southern declivity being near the Cumberland River. This valley contains, developed and undeveloped, the elements of national wealth to an almost incalculable amount.

It is now, though not half developed, a very fine farming country. I have been at some pains to gather data, and, though the past year, 1879, was very far from being an average in the yield of farm products, it may be safely stated that in the counties aforesaid there were gathered and fatted, as the crop for the year, the following, in round numbers, viz, of tobacco, 20,000,000 pounds; of hogs, 135,000 head; of hay, 25,000 tons; of corn, 10,000,000 bushels; of wheat, 1,000,000 bushels; besides oats, rye, barley, and potatoes in large quantities, and fruits of all grades adapted to the climate in the greatest abundance. Almost the entire valley is admirably adapted to grazing purposes, blue glass being indigenous to most of it, and orchard and other grasses and clover growing very finely on the whole tract of country. At the present time the yield of cattle is by no means inconsiderable, and there is no section of the Union better suited for the raising of sheep, horses, and mules. Moreover, there are immense forests of superior timber, and vast beds of the best iron ore, which only need the facilities of cheap transportation to insure their development. Many years ago there were two large furnaces and a forge profitably operated in Hart County, and one in Edmonson County, and there are beds of the finest quality of iron ore in said counties and in Grayson County sufficient to supply the United States for the next century. The opening of arteries of cheap transportation in other sections of the country compelled the abandonment of these manufactories of iron, but if Green River be made reliable as an outlet to market at rates as low as elsewhere these furnaces will again doubtless be soon in blast.

[From Mr. A. B. Baird, in regard to Rough Creek, one of the principal tributaries of Green River.]

The creek is flanked on both sides by a forest, comprising all the varieties of oak, with poplar, black and white walnut, hickory, gum, cherry, persimmon, birch, and elm, with an undergrowth of dogwood, red-bud, pawpaw, and spice brush. Much of the poplar and oak have been run as rafts to Evansville and other markets, or made into staves and carried in flatboats to New Orleans, but there is a vast and almost inexhaustible quantity yet on or contiguous to the creek. There are also many other kinds of timber than those named that are very valuable, such as chestnut, maple, locust, and catalpa. Around the falls there are vast forests of chestnut-oak, which produces the finest tanbark known to tanners.

It is not known certainly that minerals can be found in the limestone formation, but near where this changes to sandstone lead has been found, and considerable mining been done for it; but for the want of experience and capital on the part of those engaged in it, and for want of reliable and cheap transportation, operations have been suspended. At other points on the creek, between Hines's Mill and Hartford, lead has been found.

As soon as the creek enters the sandstone formation it is flanked on each side by beds of bituminous coal, from 2 to 6 feet thick; these veins, for want of reliable navigation,

have been operated only for neighborhood purposes. This coal-field extends to the mouth of the creek, a distance of 80 miles by the creek. In this section of the creek iron ore in vast quantities is found; at one place especially, some 8 miles above Hartford, is a deposit that has been called "Iron Mountain," from the vast deposit of that ore at that point. Along the creek, or contiguous to it, are many mineral springs, the most celebrated of which is White Sulphur, 2 miles from Hines's Mill; salt has been found at many places, and many wells were worked in the primitive days of the State.

An air line from the falls at Green's Mill to the mouth of the creek is about 45 miles. The nearest points of the creek to the Ohio River are from Green's Mill to Cloverport, 24 miles, and from Hartford to Owensborough, 27 miles. The distance from Green's Mill to the Paducah and Elizabethtown Railroad at Caneyville is 15 miles, and from Hartford to the same road is 5 miles. The slackwatering of Rough Creek will make it a competitor for the trade of the country to an equidistant point from it to the Ohio River and the railroad, and will give the creek a monopoly in carrying minerals. Thus the slackwater of Rough Creek will have the trade of more than 1,000 square miles of good average farming land of this section of the State, not over one-half of which is now cultivated. This is in the heart of the best tobacco belt in the State, and produces corn, wheat, oats, and the very best hay, besides all of the smaller garden products. I would mention also that Rough Creek is considered one of the best streams for fish in the State. A large number of the improved breeds have been placed in it, and they are found to be prospering finely.

Rough Creek runs, by its meanderings, through Ohio County about 80 miles, dividing the county in proportion of three-sevenths on the north and four-sevenths on the south. The county is prospering and increasing in population as no other county of the State that has no large towns or cities in it. The last return of votes showed 4,200. Fruits of all kinds flourish and do well, and besides the large timber I have mentioned I failed to mention hoop-poles; they are abundant and inexhaustible, as the same ground can be cut over every three or four years. Horses, cattle, hogs, sheep, and mules are healthy. Land is cheap along the creek, which would, by the slackwatering, be trebled in a few years. *Rough Creek is the largest creek in the world.*

[From John R. Proctor, State geologist of Kentucky.]

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The resources along Green River, Kentucky, are of such a character as to warrant the assertion that, if the river was opened to commerce untrammeled, there would rapidly follow a large industrial development along its valley, and important contributions would be yearly added to the commerce of the Ohio and Mississippi rivers.

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This river, penetrating through the center of the western coal-field of Kentucky, has along its banks, above the water level, a variety of coals of excellent quality. The principal coals are the main Nolin coal, of Edmonson County (the lowest coal in Western Kentucky), from 3 to 5 feet thick; the Mud River coal (probably the same as the main Nolin), located near the head of slackwater on that stream, a coal well known for its good quality. A barge-load of this coal was taken to Saint Louis some years since and tried very successfully in one of the Kingsland, now Vulcan, Company's furnaces. Coal No. 9 is 5 feet thick in Muhlenburg, Ohio, and some of the adjoining counties; coal No. 11 is 6 feet thick on Green River, and coal No. 12 varies in thickness from 2 feet to 6 feet. Some of these coals have, in years past, obtained high reputations in the markets of the Lower Ohio and Mississippi rivers. That they are favorably situated along the river for cheap mining, and can be delivered in large barges on the Ohio at the mouth of Green River at seasons when the Upper Ohio is not navigable, should certainly lead to a large development of coal-mining along the river.

I know of no region richer in coal-measure iron ores than the valley of Green River. These ores are thick, easily mined, convenient to coal, and are equal in quality to coal-measure ores found elsewhere, where there is now large development in iron manufactures, with transportation facilities inferior to those of this valley. These ores occur principally in Muhlenburg, Butler, Edmonson, and Grayson counties. In this statement brief mention can only be made of a few of the principal iron ores. The ridge extending northward from Green River for 20 miles, between Bear Creek and Green River, contains several beds of ore of workable thickness and good quality. The principal bed is regularly stratified, and is from 3 feet to 5 feet thick over a large area. It contains, as shown from analyses of carefully averaged samples :

	No. 1.	No. 2.
	Per cent.	*Per cent.*
Metallic iron	42.31	40.48
Alumina	4.83	6.71
Lime carbonate	1.21	.29
Silica	22.40	14.34
Water	10.29	12.18
Phosphorus	.28	.41

No. 1 is from an opening known as the Fedine Bank, 4 feet thick, a few miles north of Green River. No. 2 is from the same ore, 5 feet thick, 6 miles north from No. 1. Many years ago there was a small charcoal furnace on Nolin River; the pig-iron made at this furnace was a cold-blast iron of great strength and toughness.

The following is an analysis of this iron:

	Per cent.
Iron	94.287
Graphitic carbon	3.100
Combined carbon	.700
Silicon	.493
Phosphorus	1.029
Sulphur	.012
	99.611

Some of the ores in this region could doubtless be used successfully for making steel by the Basic process.

In Muhlenburg County, near slackwater navigation on Mud River, there is a stratified iron ore from 3 feet to 6 feet thick. This is the same ore as the Edmonson County ore, of which analyses are given above.

This ore has—

	Per cent.
Metallic iron	45.10
Alumina	6.98
Water	12.31
Silica	14.20
Phosphorus	.39

On top of No. 12 coal in Muhlenburg County, it is a "Blackband" iron ore from 12 inches to 14 inches thick.

An average sample from this bed gave the following:

	Per cent.
Metallic iron	44.13
Alumina	5.29
Water	13.43
Silica	12.25
Phosphorus	.06

In Butler County, near the mouth of Little Reedy Creek, and near Green River, is an ore showing on the outcrop 3 feet thick. Analysis from averaged samples gave the following:

	Per cent.
Metallic iron	34.63
Alumina	8.17
Water	9.75
Silica	31.90
Phosphorus	.15

That furnaces along Green River can depend on a reliable supply of cheap and good iron ore, there is no question. In addition to the large deposits of ores contiguous to the coals, the excellent limonite iron ores from the Cumberland River can be delivered to furnaces on Green River at a reasonable cost. These ores have from 45 per cent. to 52 per cent. of metallic iron, and some of them run as low as .07 per cent. in phosphorus. The high-grade ores from Iron Mountain district of Missouri would cost less delivered to furnaces on this river than to the furnaces in the Upper Ohio Valley, where much of this ore is now used. Thus it will be seen that cheap and pure ores are accessible along Green River, and that with the combination of coals, ores, and very pure

limestone there should be a large development of iron manufacturing in this valley. Connecting, as this river does, with the great system of water-ways of the Mississippi Valley, the production of cheap iron ore will be of great benefit to the consumers of iron in the entire valley. The extensive forests of valuable timber along the river, the quarries of fine building stone, the clays and other resources to be developed, together with the fertility of the soil, give assurance that the opening of this river to free navigation will bring about an industrial activity widespread in its quickening results on the commerce and trade of the entire country.

APPENDIX 3.

VALUE OF THE FRANCHISE OF THE GREEN AND BARREN RIVER NAVIGATION COMPANY.

Although not definitely called for by the instructions of the Board, a reference to the value of the franchise of the Green and Barren River Navigation Company may be considered proper.

The franchise of the company, granted by the State of Kentucky, covers a lease of the locks and dams on the Green and Barren rivers, said lease running to March 9, 1898. It also confers authority to collect tolls, run steamboats, operate coal mines, and engage in general business. These rights of the company under its lease have been confirmed by the supreme court of the State of Kentucky and free commerce from present time to March 9, 1898, can only be secured by purchasing, or otherwise extinguishing, the rights of the navigation company.

The river and harbor act of July 5, 1884, directed the Secretary of War to report * * * "the provisions and estimates of cost necessary to relieve the same (Green and Barren rivers) from incumbrance." In response to a request, the company submitted, January 2, 1885, a proposition to transfer to the United States for the sum of $400,000 all its rights and privileges to collect tolls upon Green and Barren rivers and whatever claim it might have in the property acquired by its charter.

On March 8, 1886, in response to another request under direction of Congress, the company again submitted a proposition, which was the same as the former one except that a proportionate reduction in the amount was made for the portion of the life of the lease which had meanwhile expired.

In response to a third request, made by this Board under date of September 24, 1886, the company still adheres to its former determination of the value of its franchise, which at present time (November 26, 1886) with eleven years and four months to run, amounts to about $338,000.

At the same rate the value of the franchise on June 30, 1887, would be about $325,000.

In submitting the company's proposition the president says:

"This property has to us a certain monetary value. Upon its possession hinges the earning capacity, of this company, and upon its capacity to earn dividends for the stockholders must its value to the commerce of the country at large be fixed."

In connection with the first proposition of the company Maj. J. C. Post, Corps of Engineers, in his report of January 27, 1885, remarks:

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"It is also stated that the company's boats, which are the only ones plying these rivers regularly, carry yearly about 50,000 tons of freight, which is estimated to be four-fifths of the commerce upon the rivers. According to the statement made the company receives about $10,000 annually for tolls upon the remaining one-fifth."

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"In determining whether the valuation, $400,000, placed by the Green and Barren Navigation Company upon their right to collect tolls, &c., upon these rivers is too great, it has been thought best to establish a comparison between that sum and the probable amount that the charter will net the company during the thirteen years before its expiration.

"Assuming the receipts from tolls, &c., to be $50,000, as before stated, and the expenses of operating and repairs to be $12,000 annually, the net receipts of the company will be

$38,000 a year. The question then becomes, what is the present worth of an income of $38,000 a year, paid annually at a certain per cent.? This has been calculated by the ordinary formula for annuities, at compound interest, and the results are as follows, viz:

At 6 per cent	$336,401.84
At 5 per cent	356,955.66
At 4 per cent	379,454.70
At 3 per cent	404,128.48

'In estimating the annual expenses likely to be incurred, the present condition of he works has been considered."

If it were proper to base the value of the franchise to the company simply on the tolls collected the estimate given would appear very extravagant. The amount of such tolls, according to the statement of the company, is about $10,000 per annum, which, considering 3 per cent. a proper rate for calculation, would make present worth of franchise, so far as tolls are concerned, less than $100,000. But the value of the franchise to the company does not come alone from tolls collected. Its profits are mainly from freights and business enterprises which the company, owing to its control of the river, can carry on to the exclusion of others. For data as to the volume of such business at the present time dependence must be placed on the records and letters of the company. Whether such business will increase or diminish is simply conjecture. The company assume as a basis in their calculations the profits of the year 1884, and claim that the records for 1885 and 1886 show an increase in business, and that there is no reason for fearing a decrease during the remaining years of the lease.

But it is asserted by others that the river business has declined, and will continue to decline as long as circumstances, now existing, prevent competition and a full development of the resources of the country. Three railroads now cross the river and a branch of the Owensboro and Nashville has been completed to the Mud River Coal Mines near the mouth of Mud River, which enters the Green at Rochester.

While the estimated value of the franchise, assuming the company's figures to be correct, appears fair enough from their point of view, it is claimed the company could well afford to materially reduce its selling price, for the reason that, although the abolishment of tolls would introduce competition in transportation and its other business enterprises, still the company would start in such competition with great advantages over competitors, being firmly established and possessed of the requisite property and facilities.

It is even claimed by some that the benefits which would accrue from the increase in business certain to result from the abolishment of tolls and extension of improvements by the General Government, would more than compensate the company for the loss of the monopoly of the present river business. In this connection we quote from a letter of the president of the company:

"When the mining interests along the river shall have been fully developed, I predict that no portion of our commonwealth will exceed this in point of solid wealth, and I believe that once under the control of the General Government, with free locks, the wealth of this section would be rapidly developed;" and again, "I would estimate the total value of the commerce of Green River at about $6,000,000 more, probably above than below this amount. This does not represent the resources of the section of country to be benefited. The one item of coal with a present output of 70,000 tons could be increased seven-fold, and the timber product is inexhaustible. In the counties adjacent to this line of navigation, it is safe to assert that 50,000,000 pounds of tobacco are annually grown, and fully one-half of that amount would go to market by way of these rivers were they made free and thus afford cheaper transportation."

Considering the value of the franchise in the light of damages to the company which would result from opening the river to competition by extinguishing their right to tax commerce, the price asked seems excessive.

But, considering the franchise as a piece of property which the company legally holds and which is to be transferred by voluntary sale, its price is the amount which the company is willing to accept.

Detailed statements showing the business or profits of the company cannot be made for the reasons given in the following extract from a letter of the president of the company:

"We do not consider it wise or prudent to exhibit in a public document the extent of our business or the profits arising from it further than is contained in my former letter to Captain Post."

Being unable to present and discuss such detailed statements of the business of the company, the board does not feel justified in expressing any more definite opinion as to the price asked by the company than has already been given.

APPENDIX 4.

COST OF LOCKS AND DAMS ON GREEN AND BARREN RIVERS, AND PRESENT VALUE TO THE UNITED STATES.

The first contract for work of improvement on Green and Barren rivers, being for Lock and Dam No. 2, was let by the State of Kentucky in December, 1833; work on Lock No. 1, Green River, was let October 7, 1834; Nos. 3 and 4, Green River, and No. 1, Barren River, were commenced in 1836. Lock No. 2 was opened in December, 1837, and the whole improvement was completed in 1841.

From this it appears that the work extended through a long series of years, and by reports of the Green and Barren River Commissions it is shown that it was carried on under unfortunate circumstances, which increased its cost over original estimates. The report of the Commission for 1836 states:

"In the progress of the Green and Barren River improvement many difficulties have been encountered by the board, and the duration of their public service, already protracted beyond what they expected, is threatened with indefinite duration by the unfortunate delay of the work. The improvement was begun at the close of a long series of years, the most favorable for such an enterprise; it has progressed through three successive seasons, the most unfavorable—general sickness upon the river marking the first, and continued high water the two last. Its cost was estimated when hands and subsistence were low and abundant; its construction has been prosecuted when both were scarce and dear."

An estimate of the total cost of these works, made in 1836, called for about $375,000, which appears to be an increase over estimate made before work was commenced. In a report of the chief engineer of the works, made at close of year 1839, at which date, locks and dams 2 and 3, Green River, were completed and the other work well under way, the total cost, based on previous expenditures and estimates for completion, is given at about $600,000.

In a letter addressed to W. Milner Roberts by Mr. Alonzo Livermore, under date of February 25, 1867, the total cost of the work on the rivers is given as $780,000, and in a final report, submitted by D. R. Haggard, chairman of Board of Internal Improvements, it is stated that there was expended on the Green and Barren rivers from 1835 to 1847 (inclusive) the sum of $859,126.79.

But in both the last totals given it is possible that items not directly chargeable to the locks and dams may be included. The report of December, 1839, is in detail, and it seems that the figures there given may properly be accepted as the true cost of the works with which this investigation is interested. The original cost of these works is therefore assumed at about $600,000, and, while the price of labor may now be slightly in excess of the rates paid twenty-five years ago, it is believed that, under favorable circumstances, could now be constructed for the original cost.

It is a very difficult matter to determine the present value of these works, which must depend on the amount of repair necessary to restore them to the perfect condition they were supposed to be in when completed. Estimates for such repairs are necessarily rough approximations.

The general plan of improvements on Green and Barren rivers was furnished by General Abner Laycock in 1833, and the work he planned was the pioneer improvement of the kind in the United States. Mr. William B. Foster was the first chief engineer, but, owing to ill-health, he resigned early in 1835, and Mr. Alonzo Livermore was appointed in his place. The able management of these gentlemen resulted in most excellent work; and since the locks and dams have been under the control of the Green and Barren River Navigation Company great credit must be accorded them for placing and keeping the line in a state of efficiency, their books indicating that an average expenditure of about $11,000 (including salary of superintendent, $2,000 per year) has been made for repairs.

But, while the work was originally well done, and while it is probable that with the same care as has been exercised in the past, the locks and dams will remain serviceable for a number of years, it appears, from the detailed examination made under Major Post's direction, by Assistant Engineer A. Leslie Duvall, and reported on under date of January 21, 1885, and confirmed by the examination of the Board, that many defects and weak points exist, and that very extensive repairs will be necessary to put the works in such thorough condition as is proper and customary in Government constructions. From experience gained in repairing similar structures elsewhere, it would appear that not less than $250,000 would be required for rebuilding leaning and cracked walls, repairing dams and abutments, and placing all parts of the works in such perfect condition as to make them absolutely safe and sightly and reduce current repairs to a minimum. This reduces present intrinsic value to about $350,000.

In considering the value of the existing works to the United States, it may be proper to refer to the fact that, for the full development of the resources of the Green and Barren rivers, an increase in the capacity of the locks and approaches, and, in some cases, a change of location of locks may be desirable in the interest of economical transportation; and if at any future time such improvements may be provided for, the value of existing works will be materially reduced. As a part of a general system of improvement, which the interests involved demand and which might be undertaken by the General Government, it does not appear that Locks 1 and 2 Green River, would be of much service, and on this basis the value to the United States of existing works would be reduced to about $200,000.

But, assuming that the interests of general commerce and the special conditions of existing navigation justify and render proper the taking charge of these rivers by the General Government, as contemplated by the act of the Kentucky legislature, it would appear proper to consider the present intrinsic value of the works which would come into the hands of the United States, rather than their reduced value as a part of an enlarged system, for the reason that such enlargement is an undetermined question of the future and, if provided for, would occupy much time. Until such work is decided on and carried out, the existing works must be used and would benefit commerce to an extent commensurate with the value placed on them.

As bearing upon the present value of the existing works, the report of Mr. Duvall, made to Major Post in 1885, is appended.

REPORT OF MR. A. LESLIE DUVALL, ASSISTANT ENGINEER.

UNITED STATES ENGINEER OFFICE,
Cincinnati, Ohio, January 21, 1885.

SIR: I have to submit the following report on surveys of the locks and dams on Green and Barren rivers, Kentucky, made in obedience to your orders.

I began the surveys November 28 and completed them December 20, 1884.

LOCK AND DAM NO. 1.

This lock is situated on the left or west side of Green River, at Spottsville, Henderson County, Kentucky, 8½ miles above its mouth and behind an island 1,225 feet long and 285 feet wide at its widest part. The lock is approached at each end by a narrow channel. At the upper end this channel is 820 feet long and from 65 to 73 feet wide, with a minimum depth of 5.5 feet in the middle. At the lower end the channel is 420 feet long, 52 feet wide, with minimum depth of water in the middle of 4.5 feet. These channels require frequent dredging to keep them to the required depth.

The dam at this place extends across the river from the outside of the island and has a masonry abutment at each end; the abutment on the island is connected with the eastern lock-wall by a wall across the island, joining the upper counter-fort of said wall with the upper counter-fort of the west abutment. These abutments and the wall across the island appear to be in good condition, with the exception that the coping and part of one course of masonry is gone from the east abutment, and on the west abutment there are two coping stones loose and one gone from the upper counter-fort. The abutments have a batter of 1 inch to 1 foot on their faces. Each of these abutments were formerly occupied as mill sites, but nothing now remains of the mills but a few decayed timbers and some twisted and broken iron-work.

The dam is a timber crib filled with stone and covered with 6-inch sheeting, and slopes both ways from the crest at an agle of about 15 degrees; this dam leaks through the lower breast-wall at various places along nearly the whole length of the dam; the back of the dam is protected by riprap.

The dam is not built on a straight line; it has an angle in it, the vertex pointing upstream; the departure from a straight line at the apex is 24 feet.

The material of which the lock-walls and abutments are built is a yellowish-gray sandstone, not very hard. The walls of this lock are 8 feet thick on top from the recess to the ends of the walls, and 4.5 feet on top at other portions, and 9 and 10 feet thick at bottom. The upper portion of these walls from upper recesses to head of walls is raised by two courses of masonry 2 feet 8 inches; on the other parts of the walls three courses of 12-inch timber are bolted to raise the walls.

Both of these walls lean in toward the lock-chamber; the west one 3¾ inches, and the east one, or one toward the island, 2½ inches, making the width across top of lock-chamber, at middle, 35.5 feet, 6 inches less than its original width. There is one stone

cracked, 70 feet from head of lock, fifth course from top of west wall; also two coping stones cracked. The points of the quoins are badly broken in this lock, and there is considerable leakage around the gates where these breaks occur. The ground behind the walls is paved, but the paving is broken and torn up in many places. The lift wall of this lock, as well as of all of them, is built of timber.

The lower gates are good, having been put in new during last fall, but they leak about the wickets, of which there are two in each gate, one near heel-post, and one near toe-post. The upper gates are old gates cut off, and show signs of decay at mortises; they also leak very badly about the wickets, which are in the same relative positions as in the lower gates. There are also leaks through the sheeting of these gates.

The State of Kentucky owns 6.91 acres of ground on the west or Spottsville side, on which there is a small warehouse or tool-house and a lock-keeper's house, both frame; on the opposite side of the river the State owns 2 acres.

The highest water known here was February 19, 1884, when it reached a height of 51.78 feet above the lower miter-sill of Lock No. 1.

LOCK AND DAM NO. 2.

This lock is at Rumsey, McLean County, Kentucky, 60 miles above the mouth of the river.

This lock is approached from above by an artificial channel 480 feet long, minimum width 55 feet, and depth 6 feet, formed by three guiding dikes and some dredged material thrown up and overgrown with willows.

A mill-race (20 feet wide near its mouth) passes around the lock, leaving the channel 15 feet above head wall of lock and entering again 320 feet below the lock.

The lower channel is 1,240 feet long, 80 feet wide, and has 5.5 to 6 feet of water; it is formed by dredged material principally, piled up and overgrown with willows; there were evidences of remains of guiding dikes at the upper and lower ends of this channel.

Dam No. 2 seemed to be in good condition; there was 1.12 feet of water passing over it when I was there; it is built with an angle near the middle, the vertex pointing upstream; the departure from a straight line is 13 feet. The general construction of this dam is the same as No. 1, only the slope of the overfall is greater, being 17° 30′.

The abutment on the west side of the river is 47 feet long, 4 feet wide on top, with counter-forts at upper and lower ends, running back 27.55 feet; the face of the abutment has a batter of 1 inch to 1 foot; the top of the abutment was 9.63 feet above the upper pool. There is a crack 1¼ inches wide in the face of this abutment, beginning 14 feet from upper corner, at top, and extending down to surface of water over crest of dam, or 35 feet from upper end. There is a grist-mill on this abutment, but not in operation; there is a saw-mill immediately behind it in operation. I was informed that the upper end of the river wall was formerly used as a mill-site also.

Lock No. 2 is on the left side of the river, and was evidently built of same class of sandstone as No. 1, but of poorer quality.

The land wall is 7.9 feet thick on top, from recesses to ends of wall, and 3.84 feet thick between recesses; at the bottom it is 9 and 10 feet thick. This lock is in a very bad condition; the land wall leans in toward the lock-chamber 1.07 feet, at a point 90.33 feet from upper end, forming a bulge or bow in said wall; there are three cracks in it between the recesses, two of them extending from top to bottom, and one extending down ten courses; these cracks vary in width from one-half inch to 2 inches, and in places where the corners have been broken off they vary from 4 inches to 12 inches in width; the face of the wall is also scaled by the action of frost.

This wall is now partially supported by 13 plate washers or scraps of iron, with 5 anchor ties of 1¼-inch iron rods passing through each washer and the wall, and fastened in a crib filled with stone, built behind the land wall; counter-forts 4 feet on top extend back 30 feet from the face of the land wall at each end.

The river wall is 11.55 feet thick on top and has a batter of 1 inch to 1 foot on river face, the other face vertical; it does not lean, but has several cracked courses on the inside near the middle and sixteen leaks showing from the outside, ten of which show water spouting from fissures near the bottom, and six show water bubbling up at the side of the wall, indicating leaks under the wall. There are several holes in the outside of this wall, occurring at seams, which are from 6 inches to 3 feet in length, from 2 to 12 inches in width, and from 3 inches to 2 feet in depth. There is a crack on the inside, near the head, 1 inch wide, beginning three courses above upper pool and extending down.

The lower counter-fort has a crack 1½ inches wide from top to bottom, beginning 10 feet back from face of land wall, and breaking courses to within 8 feet of face of said wall at bottom. A stream of water pours from the lower part of this crack when the

lock is filled. There is an iron strap bolted on top of wall to keep the crack from increasing. The points of the quoins are badly broken, and there is considerable leakage around them. The lift wall in this lock is the same as in No. 1. The gates are about the same as in No. 1, lower ones new and upper ones old; all leak around wickets. There are 11.11 acres of property owned by the State on the Rumsey side, on which are situated a tool-house (frame), a lock-keeper's house (brick), and two mills (frame), one woolen-mill, and one flouring-mill. The State owns only the abutment on the opposite side. The highest water here, which occurred in February, 1884, was 39.40 feet above the lower miter-sill of this lock.

LOCK AND DAM NO. 3.

This lock is at Rochester, Butler County, Kentucky, 103½ miles above the mouth of the river. It is on the right side of the river, just below an abrupt turn to the right of 100 degrees, and below the mouth of Muddy River, which empties into the Green at Rochester.

The dam at this place seems to be tight and has had new sheeting put on recently. The end next to the abutment is 2.5 feet higher than the end at river wall. The general construction of this dam is the same as at Nos. 1 and 2. The slope of the overfall is 16 degrees.

The abutment here is good and is a projecting ledge of natural sandstone.

This lock is built of gray sandstone, not very hard. The land wall is 9 feet thick on top, from recesses to ends of wall, and 4 feet on top between recesses. This wall is 12 feet thick at bottom. There are counter-forks at each end of the wall, 4 feet thick on top, extending 30 feet back from the face of land wall. The walls from the upper recesses to heads of walls are two courses of stone higher (2.54 feet) than the other parts of the walls, but the other parts have three courses of 12-inch timber bolted on top to raise them. The river wall is 12 feet thick on top and is vertical on both faces.

The land wall is bulged in slightly about the middle; there were no cracks visible on the face of the land wall.

The river wall has three cracks visible on the river face, extending from the surface of the lower pool nearly to the top, and the wall is slightly bulged between two of them, but there were not any leaks visible. There are several places on both walls where the face has peeled off from the action of frost. On the top at both ends the walls are battered and broken, the corners of the recesses and points of quoins are also broken in many places, but not as badly as at No. 2. There was a pavement for about 50 feet back of the land wall, but most of it has been torn up. The lift wall is the same as in Nos. 1 and 2. The gates of this lock are about the same as those of No. 1, lower ones new and good, upper ones old and poor; all leak around the wickets.

The State owns property on both sides of the river; on the east or lock side 2.10 acres, on which is a tool-house and lock-keeper's house, and on the west side 7.18 acres, on which is situated a saw-mill and a blacksmith's shop; all buildings are frame and in poor condition.

The highest water known here, which occurred in February, 1884, was 48 feet above the lower miter-sill of Lock No. 3.

LOCK AND DAM NO. 4.

This lock is at Woodbury, Butler County, Kentucky, on the left side of Green River, 145 miles above its mouth, and 2,600 feet below the mouth of Barren River.

This lock is approached from above by an artificial channel 250 feet long, about 60 feet minimum width, with 8 feet of water; this channel is formed by 5 guiding dikes.

Dam No. 4 is good; it was rebuilt in 1880; it is on a curved line approximately, the middle ordinate of which is 13.15 feet; it is of the same class as the other dams already described; the angle or slope of the overfall is greater, being 20 degrees. The abutment for Dam No. 4 is a timber crib 118.2 feet long by 7.6 feet wide, filled with stone; it has a counter-fort 10 feet wide, extending back from the upper end 51 feet and into a good bank; the upper end of the abutment, where the counter-fort joins it, was 11.4 feet above the surface of the upper pool. The timber in this abutment is decaying, and several of the cribs are not entirely filled with stone.

The walls of Lock No. 4 are of hard gray sandstone of excellent quality, and are in good condition generally, much better than any of the others. The land wall is 7.8 feet thick on top from recesses to ends of wall, and 4 feet between recesses, 12 feet thick at bottom. The river wall is 12 feet wide on top, and both faces are vertical. These walls do not lean and are not cracked, and but few places at the corners of the recesses and the points of the quoins are broken.

The ground behind the land wall is paved, and 24 feet back from the face of said wall a mill-race runs to furnish power to two mills, one flour-mill and one saw-mill. Part of the saw-mill rests on the lower counter-fort of the land wall. The lift wall is the same as in the other locks already described.

The gates are about the same as those already described, with the exception that the upper gates are a little worse than the upper ones in the other locks.

At this lock it is said that there is never less than 6 feet of water over the lower miter-sill. On the Woodbury or land wall side the State owns 8.61 acres of ground, on which are situated two mills and a tool-house (frame), and a lock-keeper's house, of brick. On the opposite side the State owns 1.66 acres.*

LOCK AND DAM NO. 5, OR NO. 1, BARREN RIVER.

Lock No. 5, or No. 1, is on the right side of Barren River, 14½ miles above its mouth, and about one-fourth of a mile above Green Castle, Warren County, Kentucky, and is 60 miles above the mouth of Green River.

This lock is approached by artificial channels from above and below. The channel above is 140 feet long by 60 feet average width, with 8 feet of water; below it is 127.4 feet by 60 feet average width, and 7 feet of water. These channels are formed by two guiding dikes above and below the river-wall of lock.

The dam appears good and has had new sheeting recently; it is on gravel and has an angle near the middle, with the vortex pointing up-stream; the departure from a straight line is 10.75 feet. This dam is of the same class as the other dams; the angle of the overfall is 15° 15′. The abutment here is a solid, hard sandstone bluff, 15 feet above the surface of upper pool to the first bench and a road in the face of the bluff. There is a flouring-mill 56 feet below the crest of the dam; the head race of this mill passes over the end of the dam in a timber flume to the mill.

The lock-walls are of hard gray sandstone of excellent quality.

The land-wall is 8 feet thick on top from the recesses to the ends of the wall, and 4 feet between the recesses; it is 12 feet thick at bottom.

The counter-forts are 4 feet on top and extend 26 feet back from the face of land-wall.

The lower end of the land-wall has broken away from the lower counter-fort, in which there is a crack from top to bottom, and leans in toward the lock chamber 6 inches. There are four iron straps bolted across the crack to keep it from increasing.

There is a pavement behind the land-wall for about 30 feet back from its face.

The river-wall is 12 feet wide on top, with both faces vertical. There are two small cracks in the inner face of this wall 70 and 80 feet from the lower end.

There is said to be a leak under the river-wall 53 feet from the lower end, but it was not visible at time of survey, as the water was too high to see any indications of leakage. A spring is also said to bubble up under the lower end of this wall.

I was informed by Mr. David Stephens, who furnished stone for the lock when built, and was a former lock-tender, that 106 feet of the lower end of this river-wall was taken down and rebuilt on pile foundation in 1846 and 1847. There are but few places in these walls where the corners of the recesses or points of quoins are broken. The lift-wall is of timber, built similar to those in the other locks.

The gates are about the same as those at Nos. 1, 2, and 3, but there is not much leakage around the wickets or quoins.

The State owns 5.22 acres of ground on the lock side, on which is a tool-house near the lock, and a lock-keeper's house, with necessary outhouses, 700 feet back from the lock; all buildings are frame.

The State does not own any property on the opposite side of the river.

The highest water known here occurred in February, 1884, and was 47.42 feet above the lower miter-sill of this lock.

I append hereto a tabulated statement of the localities and principal measurements of the five locks and dams described above.

Very respectfully, your obedient servant,

A. LESLIE DUVALL,
Assistant Engineer.

Capt. JAS. A. POST,
Corps of Engineers, U. S. A.

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*The highest water known at this point occurred in February, 1884, and was 50½ feet above the lower miter-sill of the lock.

Locality and principal dimensions of locks and dams on Green and Barren rivers, Kentucky.

Items.	Locality.				
	No. 1.—On left side of Green River, at Spottsville, Henderson County, Kentucky, behind island.[1]	No. 2.—On left side of Green River, at Rumsey, McLean County, Kentucky.[2]	No. 3.—On right side of Green River, at Rochester, Butler County, Kentucky.[3]	No. 4.—On left side of Green River, at Woodbury, Butler County, Kentucky, 2,600 feet below mouth of Barren River.[4]	No. 5 or 1.—On right side of Barren River, about quarter of a mile above Green Castle, Warren County, Kentucky.[5]
Locks:					
Distance above mouth of Green River, miles	8¼	60	103½	145	160
Length over all.....feet..	214.28	214.75	214.30	214.61	214.52
Original width.....do...	36	36	36	36	36
Least present width.....do...	35.50	34.93	35.80	36	35.50
Distance between hollow quoins.....do...	161	161.65	161.53	161.67	161.75
Least water over lower miter-sill.....do...	4	4	4	6	4
Lift.....do..	17.11	14.04	18.41	15.59	15.95
Height of walls above lower miter-sill, feet.....	29.60	26.50	29.56	30.50	30.10
Height of timber addition on top of walls above lower miter-sill.....feet..	32.80	None.	32.76	None.	None.
Dam:					
Height of crest of dam above lower miter-sill.....feet..	21.11	18.04	22.41	21.59	19.95
Base.....do...	46.5	37	55	50	80
Length.....do...	529	675.6	334.5	379.7	283.3

[1] Rock foundations.
[2] Slate rock foundation.
[3] Sandstone foundation.
[4] Lock and half of dam on rock foundation; balance on gravel and piling.
[5] On gravel and timber.

APPENDIX 5.

EGISLATION, ETC., CONCERNING GREEN AND BARREN RIVER NAVIGATION COMPANY.

The Green and Barren River Navigation Company was incorporated by act of the Kentucky legislature, approved March 9, 1868. This act leases and conveys to the corporation for thirty years the Green and Barren River Line of Navigation; authorizes them to collect tolls at rate fixed by act, and to open and work coal and other mines and deal in their products; also other products of the country; also, to deal in real estate and personal property. In return, the act requires the company to use due diligence in keeping line of navigation in good repair and return it at the expiration of lease in as good condition as when received from the State; and to permit all boats, craft and other things to navigate said rivers on payment to the companies of specified rate of tolls. The act requires the company to give a bond to the amount of $500,000.

Acts of the Kentucky legislature, approved March 15, 1876, and March 14, 1878, modified the rates of toll.

An act of the Kentucky legislature, approved April 5, 1880, repealed the act of March 9, 1868, and directed the Commissioners of the Sinking Fund "for and on behalf and in the name of the Commonwealth of Kentucky to take possession of the Green and Barren River Line of Navigation, together with all houses, grounds, water-power, works, tools, implements, and machinery belonging thereto, on the 1st day of June, 1880, or as soon thereafter as practicable."

The Green and Barren River Navigation Company declined to surrender the property, and suit was brought by the State in the Franklin Circuit Court and decided in favor of

the company. An appeal was taken to the Court of Appeals, the Supreme Court of the State of Kentucky. The decision of the court was as follows:

[Court of appeals—Kentucky.—Case 16.—Equity—October 29, 1880.—Commissioners of the Sinking Fund *vs.* Green and Barren River Navigation Company.—Appeal from Franklin circuit court.]

(1) The State has the same power to improve its navigable streams as to improve her highways; and, when it is necessary to develop the resources of the Commonwealth and to facilitate commerce, contracts may be made with individuals or corporations, and, as a consideration for such improvements, the tolls arising from the use of the rivers may be transferred by the State.

(2) An exclusive privilege to navigate any stream in the State cannot be granted, but it is competent for the State to authorize the corporation improving it, under a contract with the State, to charge tolls prescribed by the general assembly, reserving the right to all citizens to navigate the stream upon the payment of tolls.

(3) The act entitled "An act to incorporate the Green and Barren River Navigation Company," approved March 9, 1868, coupled with the execution of the bond mentioned therein by the appellees, constituted a valid and subsisting contract between the State and the appellees.

(4) The act of the general assembly, entitled, "An act to repeal in part an act entitled 'An act to incorporate the Green and Barren River Navigation Company,'" approved April 5, 1880, is unconstitutional and void.

(5) The contract between the State and appellees is not the subject of repeal by the general assembly.

As also bearing on the legal status of the Green and Barren River Navigation Company may be mentioned a suit brought in 1870, in the Daviess Circuit Court, State of Kentucky, by Joseph McReynolds *et al.* against C. G. Smallhouse—at that time collector for the company—to restrain the collection of tolls and to compel the collector to allow the boats of said McReynolds to pass the locks without the payment of any tolls to him. This case was decided in favor of the company, in the following words:

"After a careful examination of all the objections urged to the constitutionality of that part of the act in question allowing tolls to be collected from boats using these rivers, and all the authorities cited, as well as such others as I have been able to get access to, my conclusion is that none of said objections have been sustained. The petitions are dismissed and injunction dissolved."

This case was carried to the Court of Appeals and the decision of the Circuit Court in favor of the company's right to collect tolls was confirmed.

An act of the Kentucky legislature, approved February 20, 1886, provides:

"That whenever the United States shall, by purchase or otherwise, extinguish the claim of the Green and Barren River Navigation Company to take tolls and to exercise control over said rivers, the consent of the State of Kentucky is hereby given to the acquisition by the United States, by purchase or condemnation, of any lands, buildings, or any other property necessary, &c.

* * * * * * *

"That for the purpose contemplated by this act, the State of Kentucky hereby transfers and cedes to the United States the five locks and dams heretofore constructed by the State on said rivers, together with all the grounds and appurtenances belonging to the same. This grant to become effectual upon the extinguishment of the claim of the Green and Barren River Navigation Company, as provided in the first section of this act, and when the Government of the United States shall by law assume control of the improvement and navigation of said rivers."

As affecting the question of extinguishing the right of the Green and Barren River Navigation Company to tax commerce by the taking of tolls, the following extract from the decision of the Court of Appeals of the State of Kentucky is quoted:

"The right of the State to resume the control of these improvements when public necessity demands it, on the payment of a just compensation to the appellee, is unquestioned; in other words, the right of the State to take private property or rights in property, acquired under a legislative enactment of whatever kind, for public use, upon compensation being made, cannot be doubted, nor can one legislature bind a succeeding one by contract, or otherwise, so as to prevent the exercise of this sovereign power."

From the record of legislation and the legal opinions here given it appears that the Green and Barren River Navigation Company derive from the State of Kentucky their authority to collect tolls, control the business of the rivers, and tax commerce; and, so far as the decisions of the Supreme Court of the State of Kentucky are concerned, the company is firmly and legally established, and is entitled to hold possession of the rivers and collect tolls till March 9, 1898, unless its rights are extinguished; and it further appears that such rights can be legally extinguished by the State of Kentucky, when public necessity demands, upon the payment of a just compensation.

It also appears that the works—that is, the five locks and dams on the Green and Barren rivers, built and owned by the State of Kentucky—have been ceded by the legislature of Kentucky to the United States, upon certain conditions, the most important of which is that the General Government, rather than the State, shall "by purchase or otherwise extinguish the claim of the Green and Barren River Navigation Company to take tolls and to exercise control over said river."

A proposition made by the navigation company to sell their franchise to the United States renders the extinguishment of their claim by the United States "by purchase" practicable. There is no special legislation known to the Board other than the act of the Kentucky legislature bearing upon the extinguishment of this claim by the United States "otherwise" than by purchase.

The acts of the Kentucky legislature referred to are given below.

AN ACT to incorporate the Green and Barren River Navigation Company.

Whereas the Green and Barren River line of navigation has always been a charge upon the State, and is now largely in debt and without prospect of any better condition; and

Whereas it is of great importance to the country to keep said line in working order, and at the same time to avoid any public expense, if possible, and believing that object can be accomplished by letting it to an incorporated company: Therefore,

Be it enacted by the general assembly of the Commonwealth of Kentucky:

1. That J. A. Robinson, J. V. Sprowle, W. S. Vanmeter, C. J. Vanmeter, E. B. Seeley, H. C. Murrell, William Brown, D. C. Turner, C. J. Smallhouse, and their associates and successors, be, and they are hereby, created a body corporate with the name and style of the Green and Barren River Navigation Company, and shall have perpetual succession during the term of thirty years, and in that name may sue and be sued, make contracts, and transact all their legitimate business as a corporation; may use and change their common seal, and make suitable by-laws for the regulation of the affairs of the company, and to regulate their elections to fill offices, vacancies, and in all things not inconsistent with the laws of the land.

2. That the said Green and Barren River line of navigation and their tributaries, together with the grounds, houses, water-works, rents, profits, tools, machinery, implements, and appurtenances, and all the franchises thereunto belonging or appertaining, be, and the same are hereby, loaned and conveyed unto the corporators named in the first section of this act, and to their associates, successors, executors, heirs, and assigns, for and during the term of thirty years from and after the time they get possession thereof; and it shall be the duty of the governor of this Commonwealth to cause possession thereof to be delivered unto them as soon after the passage of this act as they or any of them who may choose to accept may give notice of readiness to receive it upon their complying with all the conditions precedent herein provided.

3. The business of the company may be to use and suffer to be used said line of navigation for all purposes of navigation, and also the water-power, property, rights, appurtenances, and all the franchises thereunto belonging, as they may direct, not inconsistent with the purposes of said line as expressed by law; and as an auxiliary to said business and to facilitate commerce and trade, and to develop the resources of wealth along said line, it may also be their business to open and work coal mines and other mines and to deal in the products thereof, as also in the products of the country and other things as well as in the work of machinery and navigation on said line. They may also lease, buy, sell, hold, and otherwise acquire and dispose of any real and personal estate, by any manner not prohibited by law, the same as a natural person, and may do all necessary or advantageous acts in the same way in the transaction of their business, not inconsistent with the constitution of this State or of the United States.

4. It shall be the business and duty of said company to use due diligence in keeping up said line of navigation in good repair, and to return it and all its appurtenances at the expiration of the lease in good condition as at present, or unless prevented from so doing by unavoidable causes, and to hold the State harmless in the premises, and to pass and permit all boats, crafts, and other things to navigate said rivers, according to certain specified rates herein prescribed as tolls, which shall inure to said company.

5. (Organization, &c., of company.) * * * and a prior lien is hereby retained by the Commonwealth against all the property, rights, and franchises of said company, as security to said Commonwealth for the faithful performance of all the duties herein imposed upon said company; and no invidual of said company shall be bound for said company beyond the interest he may have therein.

6. All tolls shall inure to the company, and the rate of toll on passenger and freight steamboats and other boats carrying freight other than coal or stone shall be regulated by their full hull or deck tonnage according to the custom-house rules as to the management of tonnage: *Provided*, That the rate of toll for such boats passing such locks shall

not exceed per ton, measured as aforesaid, 50 cents at the first lower lock, and 30 cents at the second, and 20 cents at the third, and 10 cents each at the two other upper locks, and same for returning; and for each passenger, and for all other boats, barges, skiffs, and other water crafts, loaded and empty, including rafts and other things passing said rivers, they may establish tolls from time to time not exceeding the present rates established by the board of internal improvement as applicable to the Kentucky, Green, and Barren River lines of navigation at this time.

7. (Transfers of interest, &c.,)
8. (Liabilities for damages.)
9. (Steamboats, rafts, &c., shall obey company's rules.)
10. (Penalty for willful injury of works.)
11. It shall be the duty of the company, or such of them as may choose to accept the provisions of this charter, together with their associates whom they may choose to associate with them, to execute their bond to the Commonwealth of Kentucky, with security, the solvency of which to be approved by the governor of said Commonwealth, and be attested by him under the seal of his office, which bond shall be in duplicate, one copy to be retained by the State and the other by the company. The conditions of the bond shall be as follows: "In consideration of the undisturbed possession of the Green and Barren River line of navigation and its tributaries, together with its grounds, houses, water-powers, rents, profits, tools, machinery, implements, appurtenances, and all its franchises thereunto belonging or appertaining, now to be delivered to us, the undersigned, to hold for thirty years, under an act of the legislature incorporating the Green and Barren River Navigation Company, we accept the same, and as a company aforesaid are bound hereby in the penal sum of $500,000 to perform the duties and obligations imposed by said act of the legislature, and to return the same in good order, as set out in said act, subject to the conditions therein expressed. Given under our hands and corporate seal of said company this —— day of ——, 18—." Which bond being executed by the parties aforesaid, and approved as aforesaid, and attested by the governor, shall entitle the company and their associates to all the rights conferred by this act: *Provided, however*, That said company may associate others with them before or after the execution of said bond: *And provided further*, That the Commonwealth shall have a lien upon all property of said company to secure a compliance with the stipulations of said bond.
12. This act to be in force from its passage.

Approved March 9, 1868.

AN ACT to amend and explain an act entitled "An act to incorporate the Green and Barren River Navigation Company," approved March 9, 1868.

Whereas an act entitled "An act to incorporate the Green and Barren River Navigation Company," approved March 9, 1868, authorizing said company to collect certain tolls from boats and other things navigating said rivers according to the rates established by the board of internal improvement, as then applicable to the Kentucky, Green, and Barren River lines of navigation; and whereas the rates so established as applicable to the Kentucky River are not deemed applicable to Green and Barren rivers, and are misleading; and whereas complaints have been made that said company have violated the spirit of their charter by giving it a wrong construction, to the prejudice of the public, and in making changes not contemplated therein, and that are not authorized by law; and whereas it is clear that said company have vested rights under their said charter that cannot be impaired, but which may be confined to their just and legitimate limits: Therefore, to explain and limit the rights of said company in the protection of the public, while at the same time the vested rights of the said company must be respected,

It is now enacted by the general assembly of the Commonwealth of Kentucky:

SECTION 1. That the charges herein prescribed and limited may be charged by said company against boats, barges, and things navigating said line of navigation, and no greater charges therefor shall be made.

SEC. 2. That the rate of tolls authorized by said act to be charged against boats, according to the tonnage rule or principle, shall not apply to boats or things plying only between the dams; but all boats, barges, and other crafts plying only between the dams on slackwater in said line of navigation shall not be required to pay any other or greater tolls than such as were established by the board of internal improvement, and that were in force at the time of the passage of said act, and that were applicable alone to the Green and Barren River line of navigation, except as herein limited.

SEC. 3. No boat used exclusively in towing shall be required to pay tolls according to the rules of tonnage as claimed under said act. Such boats, in passing the locks and dams, shall only be required to pay $2 therefor at each lock to said company.

SEC. 4. The cnarge of $2 lockage claimed under said act shall not be paid on any raft of timber passing said locks and dams, but the charges shall be as fixed by the board of internal improvement, and it is as follows: For rafts 15 feet and under, 3 cents per linear foot at each lock; over 15 and under 20 feet wide, 5 cents per linear foot at each lock; rafts 20 feet wide and under 30 feet wide, 6 cents per linear foot at each lock; rafts 30 feet wide and under 36 feet wide, 7 cents per linear foot at each lock.

SEC. 5. No flat-boat or barge starting from above the influence of slackwater shall be required to pay any tolls except for passing through a lock, and that shall not exceed the rates prescribed by law.

SEC. 6. No flat-boat or barge starting within the influence of slackwater shall be required to pay exceeding $2 lockage and 3 cents per linear foot of each boat or barge at each lock; and the $2 lockage herein authorized by this section shall not be chargeable unless the boat or barge actually passes through the lock.

SEC. 7. No flat-boat or barge loaded with coal or stone or sawed lumber shall be required to pay exceeding $2 lockage and 6 cents per linear foot for such boat or barge at each lock, but the $2 lockage shall not be chargeable unless the boat or barge actually passes through the lock.

SEC. 8. This act shall take effect and be in force from and after its passage.

Approved March 15, 1876.

[Acts of 1878, page 513, chapter 432.]

Be it enacted by the general assembly of the Commonwealth of Kentucky:

SECTION 1. That section 5 of an act entitled "An act to amend and explain an act entitled 'An act to incorporate the Green and Barren River Navigation Company,' approved March 9, 1868," approved March 15, 1876, be amended by inserting, after the word "barge," the following: "Or rafts of logs or timber of any kind."

SEC. 2. That section 6 of said act be amended by adding, after the word "barge," whenever it occurs in said section, the following: "Or rafts of logs or other timber."

SEC. 3. This act shall be in effect from and after its passage.

Approved March 14, 1878.

AN ACT to repeal in part an act entitled "An act to incorporate the Green and Barren River Navigation Company," and to provide for the future management and control of the Green and Barren River Line of Navigation.

Be it enacted by the general assembly of the Commonwealth of Kentucky:

SECTION 1. That so much of an act entitled "An act to incorporate the Green and Barren River Line of Navigation Company," approved March 9, 1868, as loaned and conveyed to the corporators therein named, and their associates and successors, the Green and Barren River Line of Navigation, and their tributaries, together with the grounds, houses, water-works, water-power, tools, machinery implements, and appurtenances; or, as authorized the Governor to make such conveyance; and so much of said act as gave to said company the tolls and revenues arising, or to arise, from said line of navigation, be, and the same are hereby, repealed.

SEC. 2. That the Commissioners of the Sinking Fund be, and are hereby, authorized and directed, for and on behalf, and in the name of the Commonwealth of Kentucky, to take possession of the Green and Barren River Line of Navigation, together with all houses, grounds, water-power, works, tools, implements, and machi nery belonging thereto, on the 1st day of June, 1880, or as soon thereafter as practicable, by suitable agents appointed by them for that purpose.

SEC. 3. That, until otherwise provided by law, the Commissioners of the Sinking Fund shall, so far as slackwater navigation on said river is concerned, and the preservation, in good repair, of the locks and dams on said rivers, and the appurtenances thereto belonging, do and perform the duties which devolved by law upon the board of internal improvement, during the existence of said board, except as herein otherwise provided.

SEC. 4. Superintendent to be appointed. Oath and bond.

SEC. 5. Lock-keeper and collector to be appointed. To give bond (collector). Salary.

SEC. 6. Custody and control. To remit weekly. How fund to be used.

SEC. 7. Repairs, how to be made. Accounts to be examined.

SEC. 8. Commissioners to fix rates of toll.

SEC. 9. Salary of superintendent, $2,000. To make out pay-roll. Monthly report.

SEC. 10. Additional duties of superintendent as to receipts and expenditures.

SEC. 11. This act shall take effect from its passage.

Approved April 5, 1880.

(Copy of act found in Session Acts, page 64.)

CHAPTER 69.—AN ACT to grant the consent of the State of Kentucky to the acquisition by the United States of certain lands within the Commonwealth bordering on Green and Barren rivers for certain purposes.

Be it enacted by the general assembly of the Commonwealth of Kentucky, and it is hereby enacted by the authority of the same: SECTION 1. That whenever the United States shall, by purchase or otherwise, extinguish the claim of the Green and Barren River Navigation Company to take tolls and to exercise control over said rivers, the consent of the State of Kentucky is hereby given to the acquisition by the United States, by purchase or condemnation, of any lands, buildings, or other property, necessary for the purpose of erecting dams, abutments, locks, lock-keepers' dwellings, chutes, and other necessary structures, for the construction and maintenance of slackwater navigation on said rivers, or for the purpose of constructing canals on the same, and the United States Government shall have title to the ground and sites thus acquired, and all power, authority, and jurisdiction over the same which the Government of the United States may, under the Constitution of the United States and laws made in pursuance thereof, acquire over lands in the State ceded to it for similar purposes, but the State of Kentucky reserves the right to execute processes lawfully issued under its authority within and upon said grounds, sites, rivers, and canals.

SEC. 2. That in case of failure of the United States to agree with the owner or owners of any such lands as the United States deem necessary for the purpose named in the first section of this act, it shall be lawful for the United States to apply for the condemnation of such land by petition to any judge of a court of record in or nearest to the county where the land may be situated, either in term time or in vacation, notice of the time and place of such application having been first duly given by publication for thirty days prior to the day of such application, in some newspaper of general circulation, published in the county where the land lies, or if the owner or owners reside in the State of Kentucky, by personal service upon the owner or owners of such land at least twenty days prior to such application, and thereupon it shall be lawful for such judge to appoint three disinterested freeholders of the county, where such land lies, as commissioners, and having been first duly sworn to well and duly appraise the damages due the owner or owners of said land proposed to be taken, shall report in writing to the said judge the amount of damages to be paid to the owner or owners of such land, which report upon confirmation by said judge shall be held as final and binding upon said owner or owners of said land, and upon the amount of such damages being paid to the owner or owners of said land, the title of such land shall vest in the United States, and said land shall be exempt from all taxes and assessments so long as it shall remain the property of the United States.

SEC. 3. That if any person or persons shall willfully or maliciously injure any of the lands, buildings, or other property acquired or held under the provisions of this act, such person or persons shall be liable to a fine of not less than $20, and to imprisonment not exceeding six months, or both, or either, at the discretion of the court. Said offense to be prosecuted in any court of competent jurisdiction.

SEC. 4. That for the purposes contemplated by this act, the State of Kentucky hereby transfers and cedes to the United States the five locks and dams heretofore constructed by the State on said rivers, together with all the grounds and appurtenances belonging to the same. This grant to become effectual upon the extinguishment of the claim of the Green and Barren River Navigation Company, as provided in the first section of this act, and when the Government of the United States shall by law assume control of the improvement and navigation of said rivers.

SEC. 5. This act to take effect from its passage.

CHAS. OFFUTT,
Speaker of the House of Representatives.
JAMES R. HINDMAN,
Speaker of the Senate.

Approved February 20, 1886.

J. PROCTOR KNOTT.

By the governor:

J. A. MCKENZIE,
Secretary of State.

APPENDIX 6.

RATES OF TOLL CHARGED BY GREEN AND BARREN PIVER NAVIGATION COMPANY, AND RESULTING TAX ON COMMERCE.

The rates of toll authorized by the Kentucky legislature and charged by the Green and Barren River Navigation Company are shown in the following:

PASSENGER AND FREIGHT RATES.

Passenger and freight steamboats, and other boats carrying freight, shall be charged according to their full hull and deck tonnage for each time they pass the locks as follows:

	Per ton.
For passing Lock No. 1	$0 50
For passing Lock No. 2	30
For passing Lock No. 3	20
For passing Lock No. 4	10
For passing Lock No. 5	10

Tow-boats engaged exclusively in towing, for each time they pass a lock, shall pay $2.

Sawmill boats, for each time they pass a lock, shall pay 6 cents per linear foot, and $2 lockage when they pass through a lock.

Flat-boats or barges, loaded with coal, dressed stone, sawn lumber, staves, shingles, hoop-poles, tan-bark, ax-handle timber, or logs of any kind, for each time they pass a lock, shall pay 6 cents per linear foot, and $2 lockage when they pass through the lock.

All empty flat-boats or barges, for each time they pass a lock, shall pay 3 cents per linear foot, and $2 lockage when they pass through a lock.

No flat-boat or barge starting above slackwater shall be requir ed to pay tolls unless they pass through a lock.

Rafts of logs or timber passing a lock, or passing through a lock, will be charged per linear foot, each lock, as follows:

	Cents.
15 feet wide and under	3
Over 15 feet and under 20	5
Over 20 feet and under 30	6
Over 30 feet and under 36	7

All boats, barges, and other crafts plying only between the locks and dams in slack water will be required to pay the tolls established by the Board of Internal Improvements, as follows:

	60 miles or under.	e and under 103.	Over 103 iles.
Horses and mules, each	$0 25	$0 30	$0 59
Hogs, sheep, and goats	02	04	05
Cattle and other beasts of this class	10	15	20
Hogsheads of tobacco	75	1 00	1 25
Barrels of beef, pork, lard, or tallow.	06	10	15
Barrels or casks of liquor or molasses	15	25	35
Dry barrels, excepting sugar and coffee	08	12	15
Barrels salt fish and other wet barrels	10	20	30
Barrels of salt	05	09	12
Sacks or barrels of corn, wheat, oats, rye, barley, beans, apples, or other fruit, 3 bushels or less	1½	03	04
Pound freight	05	08	12
Cabin passengers over twelve years of age	50	75	1 50
Children, servants, and deckers	20	35	50
Iron, pig or bloom, per cwt	01	02	03
Thousand of brick	10	20	40
Lumber, per 1,000 feet, board measure	15	20	25
Shingles, per 1,000	10	15	20
Hoop-poles and staves, per 1,000	30	40	50

Cabinet-ware and other articles shipped by the lot, 25 per cent. of freight charges.

Rafts of timber or logs, when loaded with any of the above-mentioned articies, to pay tolls as above.

* * * * * * *

These tolls, it appears, are the same as were charged by the State of Kentucky previous to the transfer of the control of the rivers to the company, with the following important exception: Freight and passenger boats formerly paid toll on their cargoes, and the tolls were, therefore, proportional to amount of freight carried. By the company's charter it was authorized to collect toll according to custom-house tonnage or carrying capacity. This change in rates has had the effect of increasing tolls on all partially loaded passenger and freight steamboats, excepting those belonging to the company, to such an extent as to prohibit a profitable business, the tolls amounting in the case of a half-loaded boat, for a round trip, to 24 cents per 100 pounds of freight. Under State management the tolls under similar circumstances would have been but 12 cents per 100 pounds. Even this latter rate would appear to be almost prohibitory.

The passenger tariff with distances is given in following table:

Passenger tariff.

[Taking effect April 1, 1884, and subject to change without notice.]

Fare.	Distance.	From Bowling Green to—	Distance.	Fare.	Distance.	From Bowling Green to—	Distance.
$1 00	15	Green Castle	15	$3 25	104	Hogg's Falls	4
1 25	22	Mouth Gasper	7	3 25	110	Point Pleasant	6
1 50	26	Clark's Landing	4	3 50	111	Robinson's Mines	1
1 50	30	Woodbury	4	3 50	112	Livermore	1
1 75	36	Morgantown	6	4 00	120	Calhoon	8
1 75	38	Aberdeen	2	4 00	120	Rumsey	0
2 00	42	Porter's Landing	4	4 50	129	Ashbysburg	9
2 00	45	Carson's Landing	3	4 50	134	Whitesburg	5
2 25	49	Borah's Ferry	4	4 50	135	Wrightsburg	1
2 25	50	Cromwell	1	4 50	140	Steamport	5
2 25	54	Thomas' Landing	4	4 50	146	Ranger's Landing	6
2 50	60	Rone's Landing	6	4 75	150	Delaware	4
2 50	63	Young's Mill	3	4 75	158	Curdsville	8
2 50	65	Mining City	2	5 00	165	Birk City	7
2 75	68	Enola	3	5 00	168	Linnwood	3
2 75	71	Hudnell's Landing	3	5 00	170	Taylor's Landing	2
2 75	75	Rochester	4	5 00	171	Cummings' Landing	1
2 75	75	Skilesville	0	5 00	173	Mason's Landing	2
3 00	80	Riverside	5	5 00	176	Bluff City	3
3 00	85	Paradise	5	5 00	180	Spottsville	4
3 00	90	Rockport	5	5 00	190	Mouth Green River	10
3 00	92	Ceralvo	2	5 00	200	Evansville	10
3 00	100	South Carrolton	8				

Way passengers in proportion as from Bowling Green to Evansvile.

From such information as can be secured it would appear that the freight rates charged by the Green and Barren River Navigation Company, while not in proportion to tolls to which outsiders would be liable, are, on an average, about double the rates charged on the Ohio for same distances above and below Evansville.

It is claimed that rafts of logs passing the four locks pay in toll about 20 per cent. of their value; and that at times the tolls deprive loggers of their profits. Green River coal-boats are said to carry about 8,000 bushels of coal, and would pay as tolls at three locks about 10 per cent. of the value of the coal at the mines.

TAX ON COMMERCE.

The passenger and freight boats of company, it is claimed, average two trips weekly throughout the year. These boats do not pay tolls, but it is estimated that if tolls were paid by these boats the receipts from such source would be from $40,000 to $50,000 per year. The president of the company reports that the lockage on company boats and barges during the year 1884, if they had been compelled to pay at schedule rates would have been $51,000.

The actual receipt from tolls is estimated by the company to be about $10,000 per annum, and the commerce on which such tolls are paid is claimed to be about one-fifth of the business on the river. With these figures as a basis it is estimated by the company "that lockage fees alone constitute a tax of $50,000 per annum upon the commerce of the river." It is stated by the navigation company that more definite information than that upon which this estimated tax on commerce is based is not in their possession, and additional definite information cannot be secured by this board.

But, considering the figures assumed by the company, the deduced tax on commerce from tollage would seem somewhat excessive. If the amount of freight charged be assumed equal to estimated tolls, which it is not, and the effect of tolls is on an average to double freight rates, the actual tax due to tollage would be represented by half the estimate for company boats plus the $10,000 collected from others. But this method of deducing tax on commerce from tolls is thought to be somewhat in error. Such tax, so far as transportation is concerned, results not from the estimated tolls of company boats, but from the total actual increase in freight charges over those of a free river, which circumstances permit the company to charge. These rates and amounts, it is claimed, would not permit of the payment of full tolls by the company's boats with profit to its transportation business.

Referring to a report of D. R. Haggard, chairman of the Board of Internal Improvement, State of Kentucky, it appears that the receipts from tolls for the year ending December 31, 1865 (including $680 from water rents), were $20,043.03, and that the receipts for twenty-six years, 1840 to 1865 (inclusive), were $265,002.59. These figures are the actual collections at a time when all boats paid tolls, and the amount represents the tax on commerce due to tollage during the time specified. But the absence of definite figures for relative amount of business during time given and the present, the uncertainty of the future, and the authorized change in method of estimating tolls, renders reasoning from these figures impossible.

What has already been said refers to tax from tolls. There is what may be properly considered an additional tax on commerce resulting from the complete control of the river by a private corporation, which control retards the growth and development of the tributary country.

It is unfortunate that more definite information regarding the tax on commerce due to the chartered rights of the Green and Barren River Navigation Company cannot be secured; for it is on the amount of such tax, within the limit of the intrinsic value of the works, that the value of the franchise to the General Government depends.

But whatever the actual value may be, it is the opinion of the board that by immediately extinguishing the claim of the navigation company and permitting a full development of the business which the resources of the country will warrant, the saving to general commerce would be not less than $30,000 per year, or an amount during the eleven and one-quarter years the company's lease has yet to run of not less than the present intrinsic value of the works, which are offered to the United States by the State of Kentucky.

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49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 112.

MONONGAHELA NAVIGATION COMPANY.

LETTER

FROM

THE ACTING SECRETARY OF WAR,

TRANSMITTING

A report upon the commercial value and importance of the works of the Monongahela Navigation Company.

JANUARY 27, 1887.—Referred to the Committee on Rivers and Harbors and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 26, 1887.

The Acting Secretary of War has the honor to transmit to Congress, in compliance with the provisions of the river and harbor act of August 5, 1886, a report of a Board of Engineers constituted in accordance with the provisions of the act, to ascertain the value and commercial importance of the works and property of the Monongahela Navigation Company, situated on the Monongahela River, in the State of Pennsylvania.

S. V. BENÉT,
Brig. Gen., Chief of Ordnance,
and Acting Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., January 25, 1887.

SIR: I have the honor to submit herewith the report of the Board of Engineer Officers constituted to carry into effect the following provision of the river and harbor act of August 5, 1886, that

> The Secretary of War is hereby authorized and directed to ascertain the value and commercial importance of the works and property of the * * * Monongahela Navigation Company, situated on the Monongahela River, in the State of Pennsylvania; and in order to acquire such information the Secretary of War shall appoint a Board of three competent engineers from the Engineer Corps of the United States Army which Board shall * * * report to the Secretary of War, who shall report thereon to Congress at its next succeeding session.

Very respectfully, your obedient servant,

J. C. DUANE,
Brig. Gen., Chief of Engineers.

Hon. WM. C. ENDICOTT,
Secretary of War.

REPORT OF BOARD OF ENGINEERS.

PITTSBURGH, PA., *December* 21, 1886.

GENERAL: The act of Congress approved August 5, 1886, contains the following:

> The Secretary of War is hereby authorized and directed to ascertain the value and commercial importance of the works and property * * * of the Monongahela Navigation Company, situated on the Monongahela River, in the State of Pennsylvania; and in order to acquire such information the Secretary of War shall appoint a Board of three competent engineers from the Engineer Corps of the United States Army, which Board shall * * * report to the Secretary of War, who shall report thereon to Congress at its next succeeding session; and the cost of such examination shall be paid out of the sum appropriated by this act for surveys: *Provided*, That nothing herein shall be construed as committing Congress to the purchase of the said works.

By direction of the Secretary of War, a Board of Engineers, consisting of Col. James C. Duane, Maj. William R. King, and Maj. Alexander Mackenzie, Corps of Engineers, was constituted by Special Order No. 112, dated Headquarters Corps of Engineers, United States Army, Washington, D. C., August 13, 1886, to consider and report upon the questions referred to in the foregoing act of Congress.

By letter of the Chief of Engineers, dated October 18, 1886, Maj. Amos Stickney, Corps of Engineers, was detailed as a member of the Board, *vice* Colonel Duane, who was relieved in consequence of his appointment as Brigadier-General and Chief of Engineers, United States Army.

A preliminary meeting of the Board was held at Cincinnati, Ohio, on the 22d, 23d, and 24th of September, 1886. After organization, the following instructions from the Chief of Engineers were considered:

> It is desired that the Board avail itself of all attainable information upon the subjects upon which it is required to report, and to this end it will visit the localities, hold public meetings, giving due notice thereof through the newspapers, or otherwise, as may appear best, invite discussion, orally or in writing, and, in brief, use every effort to inform itself in regard to the origin of the works, respectively, the means provided for their construction and their cost; also in reference to their present and prospective value to the interests of the commerce and navigation likely to be promoted by their acquisition and improvement by the Government, with the view of making the reports full, complete, and exhaustive, and to this end every avenue of information should be pursued to its source.
>
> It is suggested in this connection that Lieut. Col. William E. Merrill and Capt. James C. Post, Corps of Engineers, may be able to furnish from the records of their offices valuable data in reference to the works specified in the act, and the Board is authorized to call upon them accordingly.

For the purpose of securing all available information the following circular letter was prepared and distributed:

> DEAR SIR: * * * In accordance with the above provision of law the Secretary of War has appointed a Board of Engineers, consisting of Col. James C. Duane, Maj. William R. King, and Maj. Alexander Mackenzie, to examine and report upon the * * * Monongahela River.
>
> It is the desire of this Board to collect all available information relating to the commercial importance, present and prospective, of the river under consideration, and such facts as may assist in forming a proper estimate of the present value * * * of the locks and dams of the Monongahela Navigation Company, on the Monongahela River, between Pittsburgh and the State line.
>
> You are respectfully invited to submit, at your earliest convenience, any information or suggestions which, in your opinion, have any bearing on the questions before the Board.

* * * * * * *

On September 21 and December 6 and 7, 1886, members of the Board made examinations of the works on the Monongahela River,

On December 18, 19, 20, and 21, 1886, the Board held sessions in Pittsburgh, the meeting of the 20th being a public one, in accordance with due notice given. At the public meeting all parties desiring to appear were accorded an opportunity to do so, and the Monongahela Navigation Company, the Pittsburgh Coal Exchange, and other interests were represented.

Much of the detailed information needed in connection with an investigation of matters upon which the opinion of the Board is desired has necessarily been obtained from the full and complete records and reports of the Monongahela Navigation Company; and while the powers of the Board have only permitted requests for information, all such requests have been most promptly and cheerfully complied with by the company, and very detailed and complete statistics have been furnished. Great assistance in the investigation has been given by members of the Coal Exchange of Pittsburgh and representatives of other interests affected by the conditions under which the navigation of the lower Monongahela is now carried on. The information furnished the Board is submitted as appendices.

The Monongahela River rises in West Virginia, runs through the State of Pennsylvania, and empties into the Ohio at Pittsburgh. Originally the river was unnavigable, excepting at certain stages of water. The valuable resources of the tributary country and advisability of its full development led to the improvment of a portion of the river by a corporation, under a charter from the State of Pennsylvania. The improvement has proved a most wise one, and has resulted in building up an immense commerce on the river. But the fact that the work has been carried out by private means and is now in the hands of private parties leads to the collection of tolls and results in a tax on commerce which, it is claimed, affects injuriously certain important interests; and is, in fact, a discrimination against one section of the country and its commerce, placing it at a great disadvantage, as compared with other sections which have had their interests developed by the United States and which are not subjected to tax.

The Monongahela Navigation Company, which built and now operates the works of improvement on the Lower Monongahela River, was incorporated under the provisions of an act of the Pennsylvania legislature, approved June 14, 1836. By this act the subscribers to stock were created a company, which was empowered—

> to form and make, erect and set up any dam, locks, or any other device whatsoever which they shall think most fit and convenient to make a complete slack-water navigation between * * * the city of Pittsburgh and the Virginia State line.

The act also regulated tolls and authorized the leasing of any water-power created, provided for sworn annual reports to the legislature of receipts and disbursements, and required an annual tax to be paid to the Commonwealth. It was also provided that work should be commenced within five years from passage of act, and completed to Virginia State line in seven years thereafter. The time for completion has since been extended. Section 18 of the act provided that the State of Pennsylvania may, at the end of twenty-five years from completion, purchase the work. Section 20 prohibited the Navigation Company from engaging, directly or indirectly, in river transportation or other business enterprises.

Since the organization of the company, thirty-three acts affecting it have been passed by the Pennsylvania legislature. Copies of these acts

are appended, marked Appendix No. 8. The most important of them, so far as this investigation is concerned, appear to be as follows:

An act of June 24, 1839, provided that all locks below Elizabeth and Brownsville should be 190 feet long and 50 feet wide; that the company should be entitled to receive such rates of toll, at their discretion, as may be just and reasonable, provided that the net dividends on stock should not exceed 12 per cent. per annum.

Section 8 provided—

> In case the Commonwealth should at any time purchase the improvement made in pursuance of this act and the act to which it is a supplement, then the Commonwealth shall pay to the company such sum or sums of money as, together with the net dividends, shall amount to the expense incurred in constructing said improvement and keeping the same in repair, with 8 per cent. per annum interest thereon.

The legislature also reserved the right—

> to alter, amend, or annul the charter of said company at any time hereafter, in such manner, however, that no injustice shall be done to the corporation.

This matter was also referred to in section 4, act of March 21, 1849, which provides as follows:

> The legislature reserves the right to alter or amend the charter of said company, at any time hereafter, should they violate, abuse, or misuse the privileges granted and such fact be previously found by the verdict of a jury. * * *

Acts of March 31, 1843, May 4, 1855, and April 8, 1857, extended the time of completing the works, the last date being the time of completion of work for extending slack-water from State line to Morgantown. The work was actually completed in 1884.

An act approved January 25, 1854, authorized the company—

> to issue stock and distribute the same, or the proceeds of the sale thereof, pro rata, amongst the owners of the present stock of the company, to an amount equal to the sum or sums which may have been expended in the construction of their improvement, and which has not heretofore been represented by stock in the company; and also, for such further amount as may hereafter be applied, out of the earnings of the company, towards the construction of the extension hereby authorized, or to the payment of the principal or interest upon any bonds or obligations of debt which have been or may be issued for the construction or extension of said improvement.

In accordance with this authority, there was distributed to the stockholders 15 per cent. of stock in 1867, and 20 per cent. in 1870, and since January, 1884, dividends have been declared in stock instead of cash, the earnings having been used for new construction.

The works of the Monongahela Company consist of four crib-dams with double locks and three dams with single locks. The lifts are about 8 feet at dams Nos. 1, 2, and 3; 10 feet at No. 4; about 14 feet at Nos. 5 and 6. Dam No. 7 extends slackwater to Dunkard's Creek, the site of the dam now being constructed by the United States. The locks first constructed at dams 1, 2, 3, and 4, and locks 5, 6, and 7, are about 190 feet long and 50 feet wide. The additional locks at dams 1, 2, 3, and 4 are 56 feet in width and from 250 to 312 feet in length.

Locks and dams Nos. 1 and 2 were completed in 1841; Nos. 3 and 4 in 1844; additional lock No. 1 was built in 1847; No. 2 in 1854. Locks and dams Nos. 5 and 6 were completed in 1856; No. 7 in 1884. Additional lock No. 3 was completed in 1884, and No. 4 in 1886.

A full description of these locks and dams is given in an appended report made by Mr. Thomas P. Roberts, chief engineer, to M. K. Moorhead, president of the Navigation Company. Appendix No. 1.

The present condition of the works, as may be inferred from the great disparity in the ages of the different structures, varies from that of new substantial masonry and timber work to that of works, serviceable but

much worn and dilapidated. Some of the locks will need but little repair for many years to come, while considerable work will soon be needed at others to put them in safe condition.

COMMERCIAL IMPORTANCE.

The commercial importance of the works on the Monongahela River built and owned by the Navigation Company is measured by the importance of the stream, which these works have improved and rendered navigable at all times.

The Monongahela River, rising in West Virginia, running through Pennsylvania, and emptying into the Ohio at Pittsburgh, has tributary to it a rich and well-settled country, of the products of which it is only necessary to consider the article of coal, the immense shipments of which are matters of public record. The item of coal alone which depends upon the Monongahela for an outlet to the markets of the country, is sufficient in amount to make this stream of great national importance. During the past ten years the shipments of coal and coke from the Monongahela have exceeded 850,000,000 bushels, an average of 85,000,000 bushels per year. During the same time the tolls received by the Monongahela Navigation Company from all sources have amounted to about $2,250,000, an average of $225,000 per year for those years.

From statements furnished the Board it appears there are upwards of 100 towboats registered at the port of Pittsburgh and employed in the moving and towing of coal out of the Monongahela River. It is also stated that there are 71 coal mines on the river, the operations of which, including shipments to market, represent cash transactions of not less than $8,000,000 per annum, and give employment to a force of about 15,000 men.

The following table shows the total shipments on Monongahela slackwater during past five years:

Shipments on the Monongahela slackwater in 1881, 1882, 1883, 1884, *and* 1885.

Articles.	1881.	1882.	1883.	1884.	1885.
Brick ..... number..	881, 400	1, 318, 175	1, 806, 161	652, 126	588, 892
Cattle and horses ..... do	382	528	766	289	998
Classified freight ..... pounds ..	30, 896, 050	42, 033, 389	35, 179, 470	27, 779, 991	27, 365, 266
Cinder ..... tons ..	.....	6, 700	450	.....	.....
Coal, coke, and slack ..... bushels ..	90, 035, 360	106, 168, 300	112, 395, 389	81, 706, 852	85, 923, 107
Fire-clay ..... tons ..	1, 288	4, 737	5, 794	2, 140	3, 463
Iron ore ..... do ...	10, 094	23, 488	31, 681	20, 840	16, 486
Iron, in pigs ..... do ..	465	1, 132	785	17	12
Lumber ..... feet ..	10, 936, 750	8, 011, 966	11, 759, 890	7, 142, 447	6, 414, 212
Posts ..... number	302, 630	17, 983	2, 800	255	12, 826
Posts, pit ..... do ...	.....	307, 320	252, 905	219, 200	201, 040
Oil ..... barrels ..	.....	1, 727	1, 479	52	1, 073
Railroad ties ..... number ..	16, 500	182, 700	57, 000	16, 750	1, 800
Sand ..... bushels ..	235, 200	541, 000	733, 700	679, 000	941, 300
Sheep and hogs ..... number ..	5, 150	10, 958	11, 017	9. 058	6, 309
Staves ..... do ...	5, 000	120, 000	135, 000	.....	4, 000
Steel rails ..... tons ..	21, 801	26. 308	43, 946	23. 844	22, 428
Stone ..... perches ..	8, 505	12, 804	15, 635	32, 067	4, 350
Timber ..... feet ..	11, 272, 900	3, 622, 567	3, 635, 624	2, 091. 740	2, 052, 100
Whisky ..... barrels ..	3, 673	4, 443	5, 719	6, 770	5, 293
Wool ..... cords ..	300	.....	32	.....	120
Passengers ..... number ..	24, 282	52, 226	26, 058	26, 871	24, 698

Statements of the Navigation Company (Appendix No. 1), and Pittsburgh Chamber of Commerce (Appendix No. 2), furnish many facts bearing upon the commercial importance of the Monongahela River and the existing works of improvement.

The money value of the commerce on this river is very great, far in excess of that of a majority of the streams upon which the United States Government, under its policy of fostering commerce, has expended millions of dollars in improvements.

The importance of the stream is indicated by the fact that the United States has already undertaken the improvement of the Upper Monongahela in West Virginia, by the construction of two locks and dams above the company works; $397,900 has already been appropriated for such work. All the commerce developed in this part of the river by the Government improvements, destined for the lower Monongahela and Ohio, must avail itself of the works of the Navigation Company; and, in this connection, the act of August 5, 1886, in appropriating money for the Upper Monongahela, provides that "no charges or tolls shall be collected on any other part of the river on any commerce on said river which originates above the works herein appropriated for."

VALUE OF THE WORKS AND OTHER PROPERTY OF THE MONONGAHELA NAVIGATION COMPANY.

The property of the company consists in certain, locks, dams, and appurtenances, and certain vested rights granted to the company by the State of Pennsylvania.

The works have a value to the company which has constructed and now owns them, and the franchise which authorizes the collection of tolls is also valuable. The works are important to the interests of commerce and navigation using them, and through these interests to the General Government, which ordinarily, under the conditions of commerce which here exist, builds and pays for such improvements.

(1) COMBINED VALUE OF WORKS AND OTHER PROPERTY, INCLUDING THE FRANCHISE.

This value is stated by the president of the company in the following language:

> Previous to the recent agitation of the question of the purchase of the improvement by the United States Government the stock of the company sold at a premium of 80 per cent., or $90 per share, and is, in the opinion of the company, now well worth that price, making the present value of the company's improvements, calculated on a basis of 4½ per cent. interest, over $4,000,000.

From affidavits furnished through the company it appears that stock of company sold in September, 1884, for $100 per share, early in 1886 at $89 per share, and in December, 1886, at $82 per share. Taking the number of shares of capital stock actually issued at the dates given, we obtain the following calculation:

20,093 shares, at $100	$2,009,300
23,893 shares, at $89	2,126,477
26,896 shares, at $82	2,205,472

It is understood that the stock is not commonly bought and sold on the market, and that the above sales were of small lots. These facts and other causes may possibly have resulted in prices which do not definitely fix the value of the works and property to the company. The computation is given to indicate a method rather than positive value.

The law permits the capital stock to be increased as new construction is carried out, and the present amount of capital stock has been so increased since the dates for which calculation is made.

The law also permits dividends of 12 per cent. on the capital stock, and increase of said stock, under certain limits, will, under favorable condi-

tions of management and repair, result in increased dividends and an increased value of property. But the repairs necessary to keep the works in a serviceable condition are indefinite, and accidents in the future, as in the past, which might cause very large outlays and affect net income, are possible. These uncertainties must affect value of property. As the value of the company property depends on the number of shares of its capital stock and the market value of such stock, both variable quantities, the Board is unable to fix on any amount which properly represents such value at any future time.

(2) VALUE OF THE WORKS (LOCKS, DAMS, AND APPENDAGES) OF COMPANY, EXCLUSIVE OF FRANCHISE.

The construction account, as taken from the treasurer's statement, including cost of locks and dams, land damages, dredging, repairs of damages due to ice and floods, cribs, repair-boats, lock houses and lots, interest on construction bonds. &c., is given as $2,001,206.94 (Appendix No. 5). This amount, together with item of $1,032,324.40 expended for general repairs, gives total outlay by company for construction and repairs $3,033,531.34. The same authority, basing calculation on recent construction, makes following estimate of value of locks and dams, apart from earning capacity, and not including engineering, land or any other accessory:

Taking the cost of Lock and Dam No. 7, being $161,733.13, as a basis, we have—

Seven locks and dams, at $162,000 each	$1,134,000
Additional lock, No. 3	220,000
Three additional locks, at cost of No. 4, $196,000	588,000
Total	1,942,000

From this estimate it is argued by the treasurer that, with all accessories and additional expenses, the works could not be duplicated at the present time for less than from $2,250,000 to $2,500,000.

The chief engineer of the company, in a detailed estimate of cost of building works *de novo*, fixes the value of such works, including all real estate and accessories, at $2,494,700 (Appendix No. 4).

It may be admitted that an estimate of about $2,250,000 for new and substantially-built works and accessories (as enumerated) does not appear excessive; but the present question is the valuation of old works, now in use, it is true, but still, in many instances, in need of extensive repairs to make them as good as new. The cost of such repairs in the opinion of the Board is about $300,000, making the present intrinsic value of existing works about $1,950,000.

In fixing the intrinsic value no account has been taken of any enlargement or additional works which might be called for in the event of a transfer to the United States.

(3) VALUATION OF WORKS AND PROPERTY PROVIDED FOR BY THE STATE.

An act of the Pennsylvania legislature which contemplated a purchase of the works and property of the Monongahela Navigation Company provided for a method of estimating value; such value being cost of work and repair, with 8 per cent. interest per annum, less dividends paid. The items of repair and dividends (Appendix No. 5) are given, but construction account not being given by years, a calculation of value on the basis established by the State cannot now be made. The date at which such purchase would have been possible by State law,

under original charter, was 1873; but, owing to the several extensions of time for completion, the twenty-five years allotted time for life of grant would date from 1884. It might, however, be practicable, with all details of calculation at hand, to estimate future amounts and determine a present worth of the value as it will be in the year 1909.

From the figures before the Board, it would appear that, up to close of year 1886, there has been expended by the company for construction and repairs, as per books, $3,033,531.34 (see Appendix No. 5). During the same time there has been received from tolls about $5,909,132, and there has been paid to stockholders, in addition to stock dividends, cash dividends amounting to about $2,200,000.

SUMMARY AND CONCLUSIONS.

The commercial importance of the Monongahela River is very great, and the river properly belongs to and should be considered among the important navigable waters of the United States.

At the present time a portion of the river is withdrawn from the fostering care of the General Government by the action of the legislature of the State of Pennsylvania, which has virtually placed the control of a portion of the river in the hands of a private corporation, to which certain vested rights have been granted.

These vested rights, which authorize the collection of tolls by the Monongahela Navigation Company, result in a tax on commerce, not excessive, but still of consequence in the present day of close competition.

The tax on the commerce of this section of the country appears unjust while the avenues to market of competing sections are made free by the Government, as in the case of the Kanawha, and, particularly, of the portion of the Monongahela itself situated above the company's works, the commerce of which passing through the lower portion is relieved from the payment of tolls to the Monongahela Navigation Company by the act of Congress approved August 5, 1886.

The company, now holding vested rights on the river, does not wish to sell or transfer its works and property to the General Government; and the State of Pennsylvania, from which the company's rights are obtained, while providing a method for eventually taking upon itself the control of the portion of river lying in Pennsylvania has as yet done nothing looking to the assumption of such control by the General Government.

The only methods apparent to the Board by which the General Government can obtain control of the Lower Monongahela are:

(1) By condemnation in the interest of the general public, with such compensation as a proper tribunal may deem just.

(2) By acceptance or purchase of the works from the State of Pennsylvania, after the State shall have properly extinguished the rights of the company and relieved commerce of the tax now imposed as a result of State legislation.

The value of the whole property to the company is placed by them in excess of $4,000,000. Basing calculations on sales of stock and number of shares of capital stock actually issued at time of sales, the value of the works and property of all kinds, including franchise and the assumption of liabilities, would appear to have been $2,009,300 in September, 1884; $2,126,477 early in 1886, and $2,205,472 in December, 1886. The satisfaction of the liabilities would require a sum varying from day to day. This amount at the date of the treasurer's statement was $277,082, which should be added to the $2,205,472, making


MARYLAND
PENNSYLVANIA
WEST VIRGINIA
PITTSBURGH
ALLEGHENY
LOCK 1.
Allegheny River
Port Perry
LOCK 2
McKeesport
Elizabeth
LOCK 3
Boston
Elkhorn
Sunny Side
Belle Vernon
LOCK 4
Greensburg
Connellsville
Youghiogheny River
Uniontown
Brownsville
LOCK 5.
Lock 6
Rices Landing
E. Riverside
LOCK 7.
New Geneva
LOCK 8 (U.S.)
LOCK 9 (U.S.)
Monongahela River
Morgantown
Cheat River
Kingwood
Little Falls
Riverville
Fairmont
Palatine
Worthington
Enterprise
Clarksburgh
West Union
St George
Shaver's Fork
Beverly
Philippi
Buckhannon
Weston
Good Hope
Roanoke
Glenville
Washington
Waynesburgh
BEAVER
Hollidays Cove
STEUBENVILLE
WHEELING
OHIO
Moundsville
New Martinsville
Middlebourne

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$2,482,554 as an actual valuation, based on the last market sales. A legitimate increase of capital stock which is being made will within certain limits increase the value of the property, but to what extent the Board cannot determine. The intrinsic value of the works and appendages, including all items enumerated by the treasurer and chief engineer in their estimates of December 30 and December 29, and *excluding* the franchise or right to take toll, is placed by the Board at $1,950,000, which does not exceed the tax in the form of tolls which commerce would pay, under present control, during the next nine years.

Respectfully submitted.

W. R. KING,
Major of Engineers.
AMOS STICKNEY,
Major of Engineers.
A. MACKENZIE,
Major of Engineers.

The CHIEF OF ENGINEERS, U. S. A.

APPENDICES.

1. Letter from the president of the Monongahela Navigation Company, referring to organization of company and value of property, including report of chief engineer descriptive of works; also rates of toll charged.
2. Memorial addressed to Congress by Pittsburgh Chamber of Commerce, relating to commercial importance of Monongahela River, and urgent necessity of making the same a free highway of commerce, and appraisal of works by S. Wainwright, consulting engineer.
3. Affidavits relating to number of shares of stock and value of same.
4. Report of chief engineer of Monongahela Navigation Company, giving estimates of cost of construction of new works and value of accessories.
5. Letters of treasurer of company, giving details of construction account, repairs, dividends, and estimates of present value.
6. Resolution of Louisville Board of Trade.
7. Opinion of the attorneys for Monongahela Navigation Company respecting questions involved.
8. Copies of acts of Pennsylvania legislature, affecting the Monongahela Navigation Company.

APPENDIX 1.

LETTER FROM THE PRESIDENT OF THE MONONGAHELA NAVIGATION COMPANY.

OFFICE OF MONONGAHELA NAVIGATION COMPANY,
Pittsburgh, Pa., October 12, 1886.

GENTLEMEN: The board of managers of the Monongahela Navigation Company having considered your letter of 23d of September, 1886, to M. K. Moorhead, president of the company, have to say in reply that they are perfectly willing to comply with the request therein contained, to be furnished with all information relating to the commercial importance, present and prospective, of the Monongahela River, and such facts as may assist in forming a proper estimate of the present value of the locks, dams, and property of this company, in so far as the same is within their knowledge. But, while having no objection whatever to giving you all the information in their power to assist you in the discharge of your duties under the act of Congress approved August 5, 1886, and referred to in your letter, they desire it to be distinctly understood that they have not offered their property for sale to the United States, nor to any person or persons, and have not had, and have not now, any intention of doing so. Speaking officially, and for themselves, and for all the stockholders of the company whose views they have ascertained (and they are a large majority of the stockholders, and

they know of none having different views), we have to say that our only wish is to be left in the undisturbed enjoyment of our property; and we comply with your request under this protest, and under the further protest that no public interest can be subserved by the appropriation of our property on behalf of the United States; that the cost of coal to the consumer will be hardly appreciably diminished, while the annual charges of keeping the works in repair, and to be borne by the United States, would be great and burdensome, and annually increasing, as permanent repairs and replacements would certainly be required. In fact, we distinctly charge that the free navigation of this river would be substantially beneficial to very few, except the owners of coal lands and dealers in coal in the upper pools, which would be much enhanced in value to the detriment of all operators in coal in Western Pennsylvania, carried to market on railroads, on which the freight rates are many times greater, and that the provision of the act of Congress referred to, if followed by further legislation appropriating the works of this company, would together constitute class legislation of the most objectionable kind.

The Monongahela Navigation Company was authorized by act of assembly of March 31, 1836, and the letters patent making the subscribers of stock a corporation, pursuant to the act of assembly of Pennsylvania aforesaid, were issued in 1837, by which the company was empowered to make a complete slack-water navigation between the city of Pittsburgh and the Virginia State line. Twenty-two supplementary acts of assembly of the State of Pennsylvania have since been passed relating to this company, most of them conferring further powers, and some of them enjoining duties. The height of the dams was originally limited to 4½ feet, but by further legislation, in order to dispense with some of them otherwise required, the height was raised to 8 feet, and Dam No. 4 to 10 feet. The act of April, 1857 (P. L., 176), required the construction of Lock and Dam No. 7 contemporaneously with the commencement of the construction of sufficient locks and dams to extend the slack-water on the Monongahela River from the Pennsylvania State line to Morgantown, Va.; and the act further provided, "That so much of all acts heretofore passed as have reference to the time of completion of said improvement to the Virginia State line be, and the same are hereby, repealed."

A description of the locks and dams as they have been constructed and now exist will be found in the report of the engineer of the company, which accompanies this statement, the same having been prepared by direction of this company for the information and use of your Board.

The tonnage carried over the works of the company is principally of coal mined from lands situated on the banks of the river. Previous to the construction of the slackwater improvement, the average amount of coal floated down the river did not exceed twenty thousand tons per annum, which was chiefly taken from mines near the city of Pittsburgh. The present annual coal trade conducted over the pools of the company is over 3,000,000 tons, the enormous increase being due entirely to the construction of the slackwater improvements of the company, which has also very greatly enhanced the value of real estate situated on or near the river, throughout the entire length of the improvement. Prior to the establishment of the slackwater navigation, the Monongahela River was not navigable for steamboats nor for boats laden with coal or freight, except in times of freshets or unusually high water, and for much the greater part of the year the river was too low for the purposes of navigation. Coal-boats could not be loaded for want of sufficient water at the place of loading, but since the construction of the dams, coal boats and barges may be loaded at all times, and are ready to go out when there is sufficient water in the Ohio River at and below Pittsburgh to float them. Indeed, instead of the works of the company being an obstruction to navigation on the Monongahela River, they have made that stream navigable at all times, and there could be no successful navigation without these or similar works. The rates of tolls are the lowest charged on any canal or slackwater improvement in the United States, and so low that to take them off altogether would not lessen the price of coal 1 cent per ton, and yet coal constitutes seven-tenths of all the tonnage over the works. Before the opening of the principal railroads running east from Pittsburgh, considerable revenue accrued from the carriage of passengers on steamers over the pools from Pittsburgh to Brownsville; but this source of revenue has been greatly diminished. The receipts from passengers were for the year 1848, $18,271.79; for the year 1875, $5,844.16, and for 1885, $3,667.70. The receipts from this source have gradually decreased.

The company commenced collecting tolls in 1841, the amount collected during that year being $1,970.43. Since then the amount of tolls has gradually increased, in 1883 reaching the amount of $279,023.56.

The average annual tolls were as follows:

1841 to 1845	$10,310
1846 to 1850	54,473
1851 to 1855	66,542
1856 to 1860	74,272

1861 to 1865	$101,065
1866 to 1870	175,812
1871 to 1875	197,362
1876 to 1880	211,128
1881 to 1885	238,160

The total amount of tolls for 1886 to September 30, being for nine months of this year, are $197,631.60.

The increase of the coal trade on the river has evidently been consequent on the gradual extension of the work and the increasing facilities afforded for the transportation of coal.

The amount of coal and slack passed out of this improvement was in—

	Bushels.
1841	1,260,000
1845	4,605,185
1850	12,297,967
1855	22,234,009
1860	37,947,732
1865	39,519,792
1870	57,596,400
1875	61,409,000
1880	84,048,350
1885	82,459,050

The total amount of construction account to date amounts to $1,821,049.89. The present amount of capital stock at its par value of $50 per share is $1,339,950, and is being gradually increased, under provisions of the charter of the company, to bring it up to the amount of the cost of construction, the difference having been paid out of the net earnings of the company, which would otherwise have been paid to the stockholders as cash dividends.

The company, for a long period during the early years of the improvement, was unable to pay dividends, but as the tonnage passing over the improvement, and, correspondingly, the tolls, have augmented, the rate of dividends has increased.

The company is limited by its charter to the payment of dividends of 12 per cent. per annum. The rate of dividends has reached that amount annually since 1876, with the exception of one year, when it was 10 per cent.

Previous to the recent agitation of the question of the purchase of the improvement by the United States Government the stock of the company sold at a premium of 80 per cent., or $90 per share, and is, in the opinion of the company, now well worth that price, making the present value of the company's improvement, calculated on a basis of 4½ per cent. interest, over four millions of dollars.

The tolls for nine months of this year amount to	$197,631	60
The expenses for operating the improvement, repairs and taxes for same period	54,356	41
Net income for nine months	143,275	19
Adding at same rate for three months	47,758	39
Gives estimated amount of net income	191,033	58

which amounts to 4½ per cent. on $4,245,000, showing that our estimate is quite within reasonable bounds.

We submit here that the value of the property of the corporation is by no means measured by the cost of the works. The company has valuable franchises committed to it by the Commonwealth of Pennsylvania, which necessarily enter into a just estimate of the value of the property. The property of an incorporated bank, railroad, canal, or other enterprise or improvement is represented by its stock, and the true value of such property is measured only by the value of its capital. The supreme court of Pennsylvania, in the case of the county of Montgomery against the managers of the Schuylkill Bridge, at Norristown, recently decided (which was an attempt of the county of Montgomery to appropriate the bridge of a bridge company, laid down the following measure of damages):

"The measure of damages, when a toll bridge is taken by a county for public use, is not merely the cost of a new structure, less the loss that has been caused by wear and decay. The right to take toll is as proper a subject of compensation as the material property of the company, and should be as thoroughly considered.

"The value of such a franchise depends upon its productiveness, not in past years, at a time when the population of the surrounding districts was much less, but at the time of taking. Nor is it material to inquire what is the value to the county taking the bridge. The question is what loss the company has sustained. Whatever is part and parcel of the main bridge, or a necessary and convenient appendage to it, should be paid for by the county.

"The property and franchise of the bridge company are represented by its stock, and the market value of the stock may be said to represent the market value of the property taken, as nearly as can be ascertained."—Pittsburgh Legal Journal, vol. 16 (new series), No. 18, page 171.

It would be futile to answer the merely fanciful and ill-considered argument, if it may be so called, that the works of this company are an obstruction and hindrance to navigation, on water declared to be navigable by an act of Congress, while it was proposed to continue precisely the same works on the same river under the authority of the United States. The State of Pennsylvania, in the exercise of a power uniformly held to be concurrent with that of the General Government, and exercised by the States for more than three-quarters of a century, has committed to this company the power, and exacted from it the duty, of providing and maintaining a slackwater improvement on the Monongahela River, giving to the company the franchise of taking toll as compensation. The company having done what the statute required it to do, has acquired as good title to its franchises and property as any man has to his dwelling. The Government cannot take this property without making compensation, and compensation is the full value of the property to the company.

As respects the prospective commercial importance of the Monongahela River thus improved, it can be judged only by the past, and we think it likely to go on increasing in importance until the rich deposits of coal in the valley of the river have been removed.

As respects other branches of commerce, including the carriage of passengers on steamboats, it does not seem to us that the commercial importance of the river is likely to be enhanced. The railroads will always take travelers and light freight on account of the greater rapidity of the means of transit.

By order of Board.

M. K. MOORHEAD,
President.

Col. JAMES C. DUANE, Maj. WILLIAM R. KING, and Maj. ALEXANDER MACKENZIE,
Board of U. S. Engineers to report on the Works and Property of the Monongahela Navigation Company.

MONONGAHELA NAVIGATION COMPANY,
Engineer's Office, Pittsburgh.

SIR: In compliance with your request, I herewith respeetfully present the prominent dimensions of the several locks and dams of the Monongahela Navigation Company. I have not at hand the length of all the dams, and so give for most of them only approximate figures.

Dam No. 1.—*Double locks.*

Length of dam, about 1,075 feet between abutment and lock wall. Position, 1 mile above the junction of the Allegheny and Monongahela rivers. Lock on right bank.

INSIDE LOCK.

	Feet.
Entire length of wall, one side	316
Between hollow quoins	250
Available length for boats	215½
Clear width between walls	56
Depth on lower miter-sill at full pool of Davis Island Dam	7¾

OUTSIDE LOCK.

Entire length of wall, one side	267½
Between hollow quoins	190
Available for boats	160
Clear width between walls	50
Depth on lower miter-sill as above	7¾
Height of walls, both locks	25

The gates are operated by steam power, excepting in the river wall of outside lock, where power is derived from a water-wheel placed in the dam. Wickets for filling and emptying the chambers are placed in the gates. The upper gates are the same depth as the lower ones. These locks are built on a solid-rock foundation. Lift of locks, 8 feet; length of pool 10 miles.

Dam No. 2.—Double locks.

Length of dam, about 920 feet between abutment and lock wall. The locks are on the right bank at the village of Port Perry, just above the mouth of Turtle Creek, 10 miles above Dam No. 1.

	Inside lock.	Outside lock.
	Feet.	*Feet.*
Entire length of wall, one side	3 7	253
Between hollow quoins	250	190
Length available for boats	216	160
Clear width between walls	56	50

Steam power is employed to operate the gates on the middle wall, a turbine on the land wall, and a water-wheel on the outside walls furnishes power for the gates of said walls respectively.

The chambers are filled and emptied by means of wickets set in the gates, the gates above and below being of the same depth. At full pool below there is 6 feet on the lower miter-sills of these locks. The foundations rest on timbers on a gravel bottom. Height of walls above floor of chamber, about 25 feet; lift of locks, 8 feet; length of pool No. 2, 14 miles.

Dam No. 3.—Double locks.

Length of dam, abutment to lock walls, about 700 feet. The locks are on the right bank of the river, about 2 miles above the borough of Elizabeth, and 14 miles above Dam No. 2.

	Inside lock.	Outside lock.
	Feet.	*Feet.*
Entire length of wall, one side	377	253
Between hollow quoins	312	190
Length available for boats	277½	160
Clear width between walls	56	50

The gates are operated by turbine wheels, except the outside wall, which has a water wheel. The foundation of the lock rests on gravel, and is composed of timber and in some parts concrete. The locks are emptied by means of wickets in the lower gates. The small or outside lock is filled in the same manner. The large lock is filled by means of wickets in the floor above the upper gates. At full pool below there is 6 feet on the lower miter-sills of these locks. Lift of locks, 8 feet; length of pool, 15 miles.

Dam No. 4.—Double locks.

Length of dam, about 800 feet, abutment to lock walls. The locks are on the left bank, at the village post-office known as Lock No. 4. At this point the company has its repair shops, and it is the winter quarters for their steamer, derrick-boats, &c. It is also the principal signal station on the river for the United States weather observations.

	Inside lock.	Outside lock.
	Feet.	*Feet.*
Entire length of wall, one side	331	253
Between hollow quoins	262	190
Length available for boats	226½	160
Clear width between walls	56	50

The gates of the outside lock are operated by means of a wheel placed in the dam. The inside lock, which has just been completed, is for the present operated by hand-power, although iron pipes 44 inches in diameter, one on each side of the walls, have been placed to operate turbine wheels. Length of pool is 16 miles; lift of lock, 10 feet. Foundation is timber and concrete on gravel bottom.

Dam No. 5.—*Single lock.*

Length of dam, about 650 feet abutment to lock walls. The lock is on the left bank, about 1½ miles above the town of Brownsville.

THE LOCK.

	Feet.
Entire length of wall, one side	253
Between hollow quoins	190
Length available for boats	160
Clear width between walls	50

The walls of this lock rest on gravel bottom. Wickets in upper and lower gates, both gates and wickets being operated by hand power. Length of pool, 10 miles; lift of lock, 13½ feet.

Dam No. 6.—*Single lock.*

Length of dam, about 600 feet. The lock is on the left bank of the village of Rice's Landing. The foundations are on rock. The lock has the same dimensions as Lock No. 5, operated in the same manner. Its lift is 14 feet, and the length of the pool above it is 14 miles.

Dam No. 7.—*Single lock.*

	Feet.
Length of dam	521
Entire length of wall, one side	261
Between hollow quoins	195
Length available for boats	162
Clear width between walls	50

This lock is on the left bank of the river, about one mile below the town of Geneva. It is operated by hand power. Its foundations are on rock.

All the locks on this improvement are built of cut stone laid in cement.

As there is no slackwater system of navigation in the United States approaching in importance and gross annual business accommodated that of your company, so there is none which requires such large annual expense for its maintenance.

The locks at Dam No. 1 upon one occasion in twenty-four consecutive hours passed over 2,000,000 bushels of coal, or over 80,000 tons, but this is by no means the measure of the ultimate capacity of the locks, for much more could have been done had the boatmen not interfered with each other.

But a large business also means extensive repairs, and material for repair of gates, machinery, &c., must be kept constantly on hand, and unfortunately the extent of the annual repairs caused by floods, ice, &c., can never be calculated in advance. Much of the expense of repairs might be saved were it not for the imperative demands of the peculiar freshet system of navigation done on the Ohio River, as the time chosen to do the work must as near as possible suit the condition of the lower rivers.

Notwithstanding this drawback, the Monongahela Navigation Company is kept perennially in order, and it is thus able to contribute to the Ohio the great bulk of the latter's annual tonnage. Its capacity for business is practically illimitable, but it can only be maintained in this high stage of efficiency by unremitting care and attention.

Respectfully submitted.

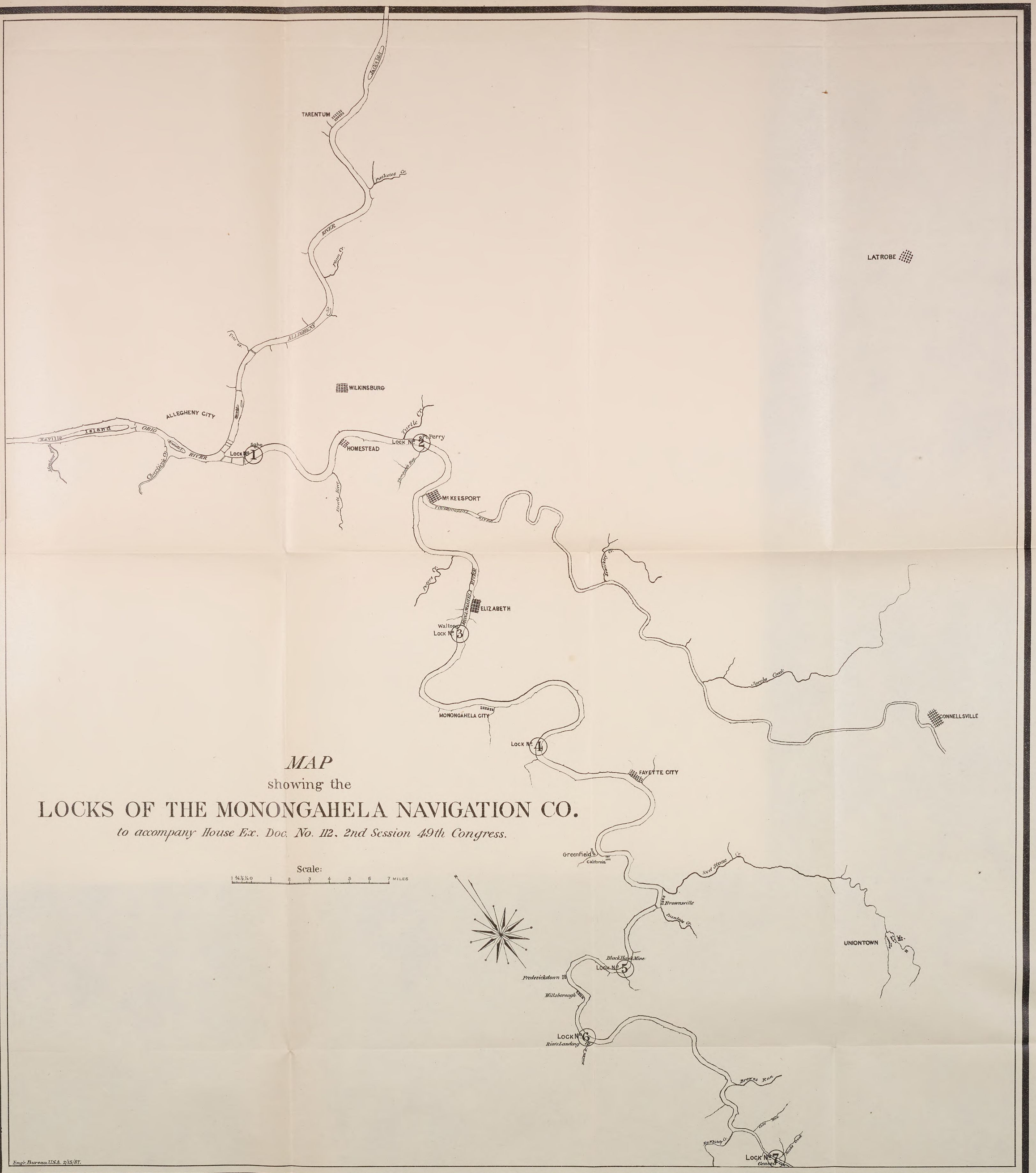
THOMAS P. ROBERTS,
Chief Engineer.

PITTSBURGH, *October* 8, 1886.

M. K. MOORHEAD, Esq.,
President Monongahela Navigation Company, Pittsburgh.

REVISED RATES OF TOLL TO BE CHARGED ON THE MONONGAHELA SLACKWATER, ON AND AFTER JANUARY 1, 1886.

Articles in Class No. 1.—Copper of all kinds, confectionery, drugs and medicines, furniture, feathers, fruits not specified, furs, peltry, and skins, glassware; hides, dry; hardware and cutlery; leather, dressed and undressed; lead, white, red, and litharge; liquors, foreign; merchandise, not specified; marble, manufactured; oils, paints, and dye stuffs, oysters, paper of all kinds, queensware and chinaware, spices, steel, steam engines and machinery, tin and tinware, tobacco, manufactured.



MAP

showing the

LOCKS OF THE MONONGAHELA NAVIGATION CO.

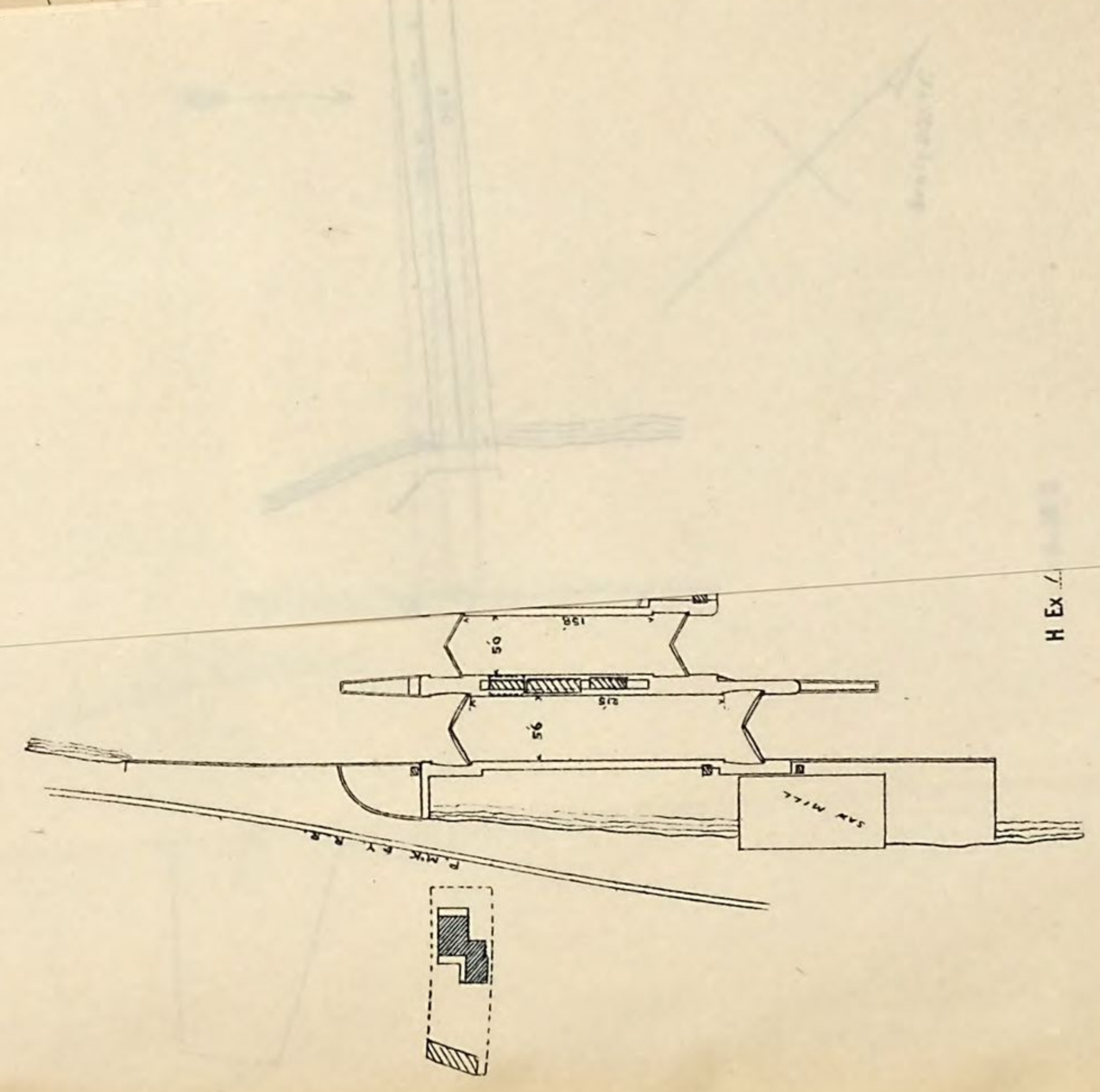
to accompany House Ex. Doc. No. 112. 2nd Session 49th Congress.

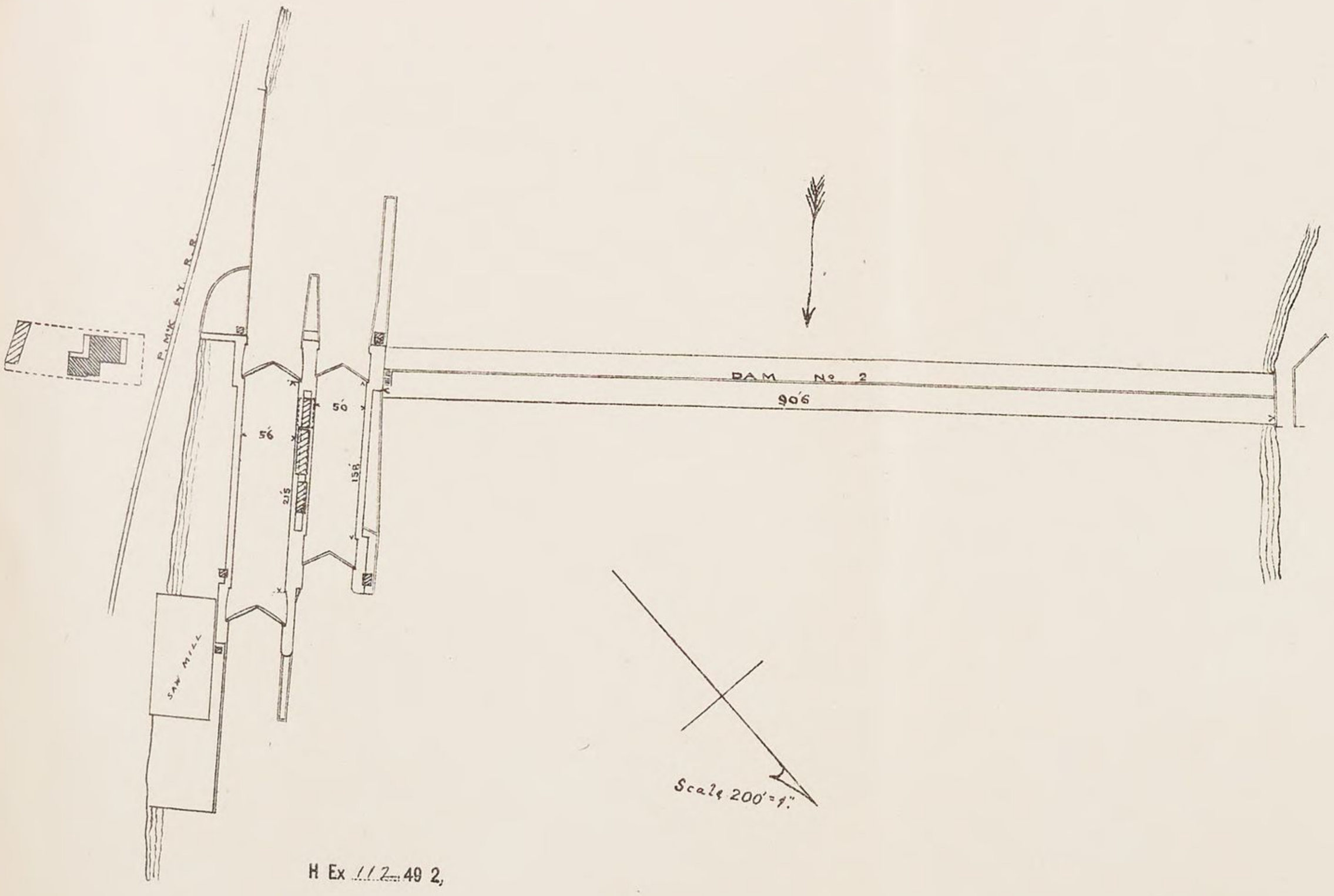
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1 ¾ ½ ¼ 0 1 2 3 4 5 6 7 MILES

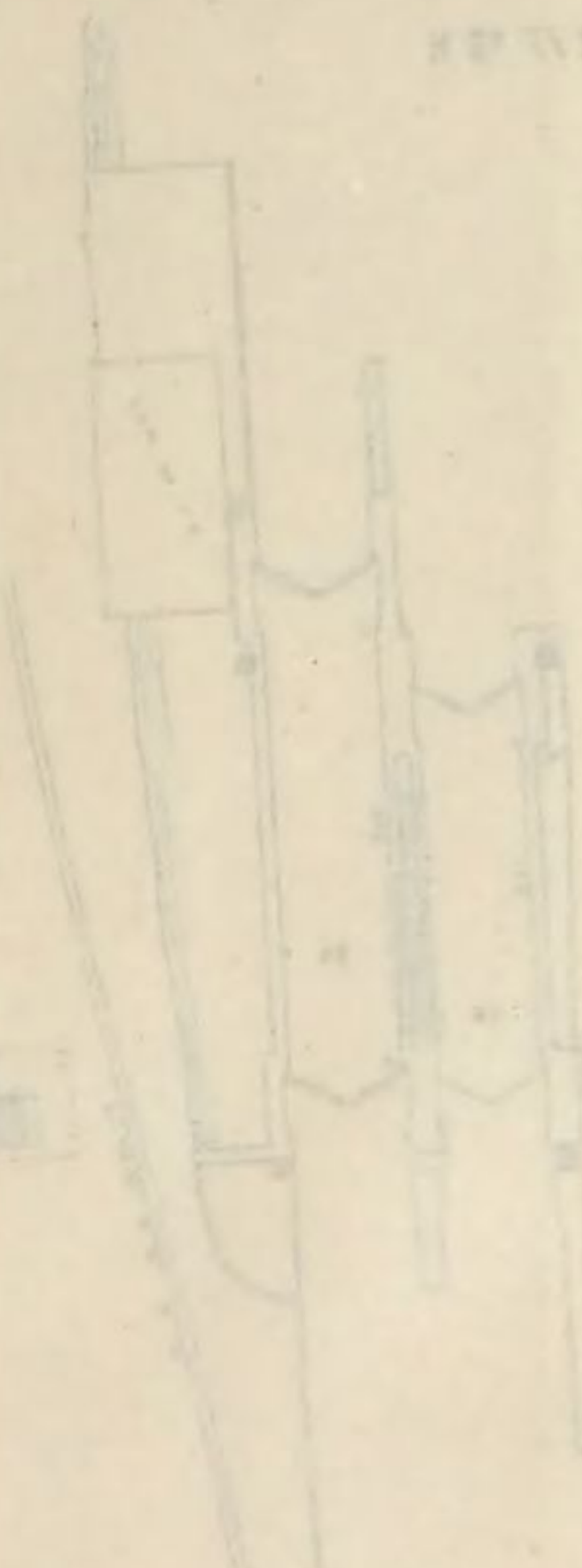
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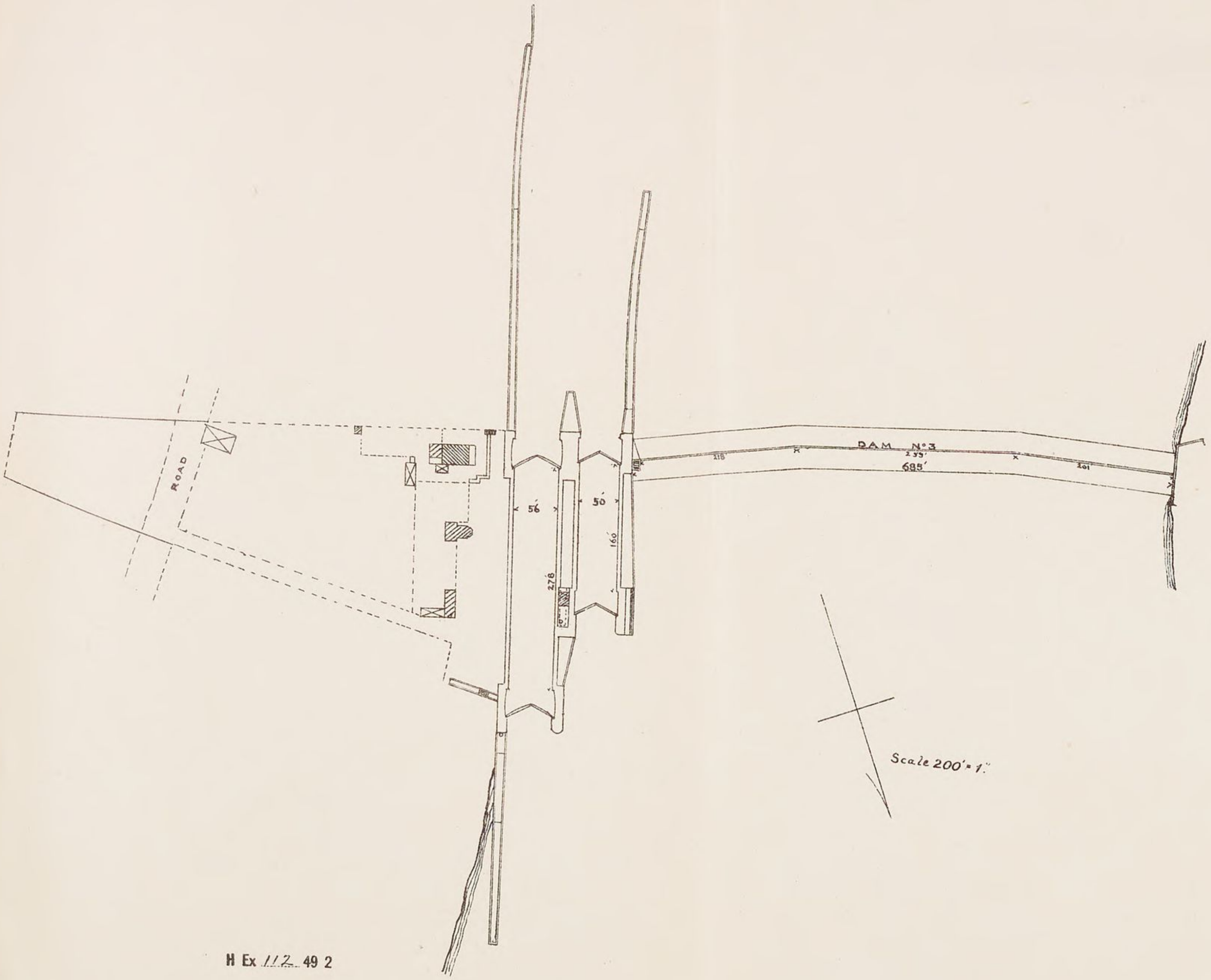
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SAW MILL
RAILWAY



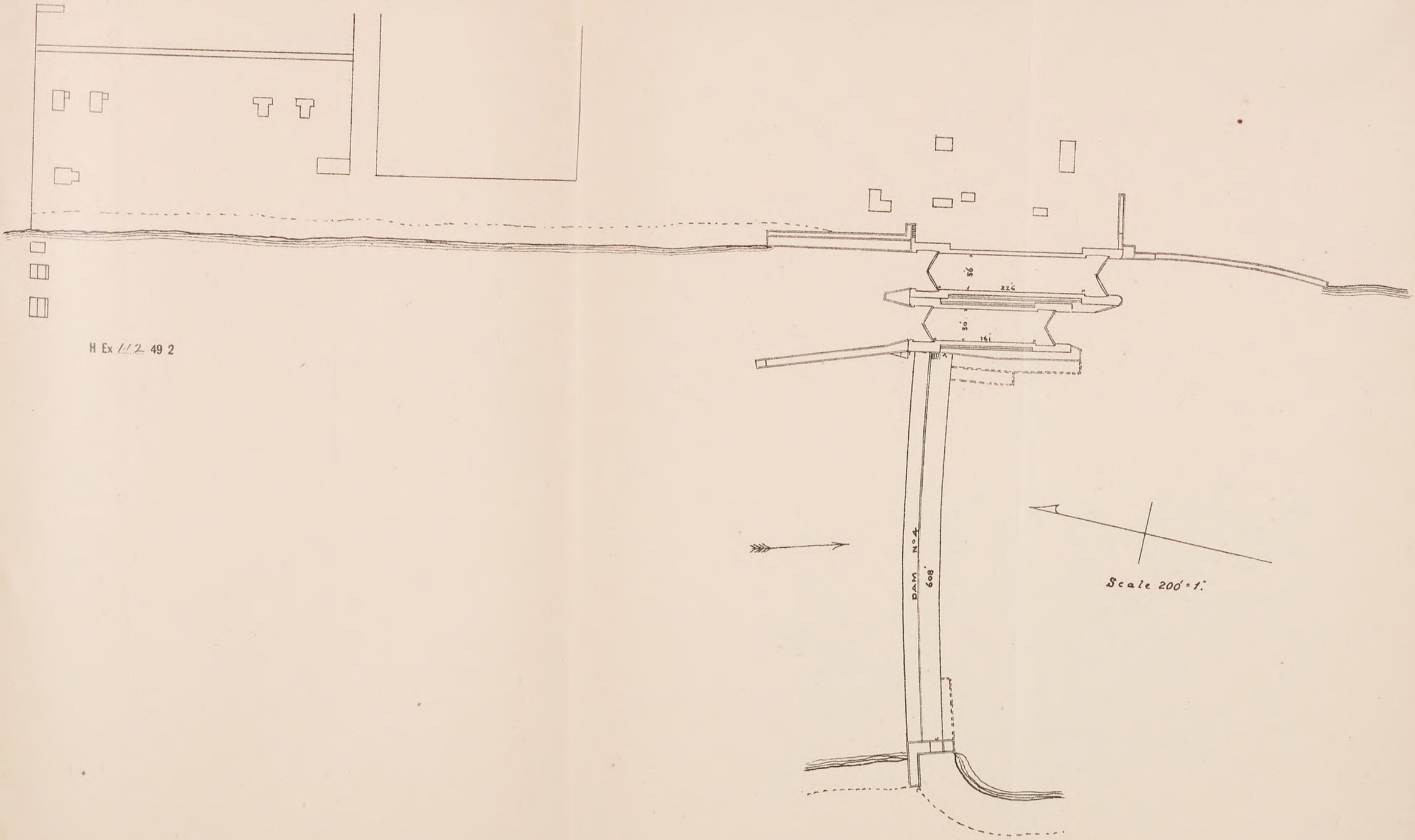
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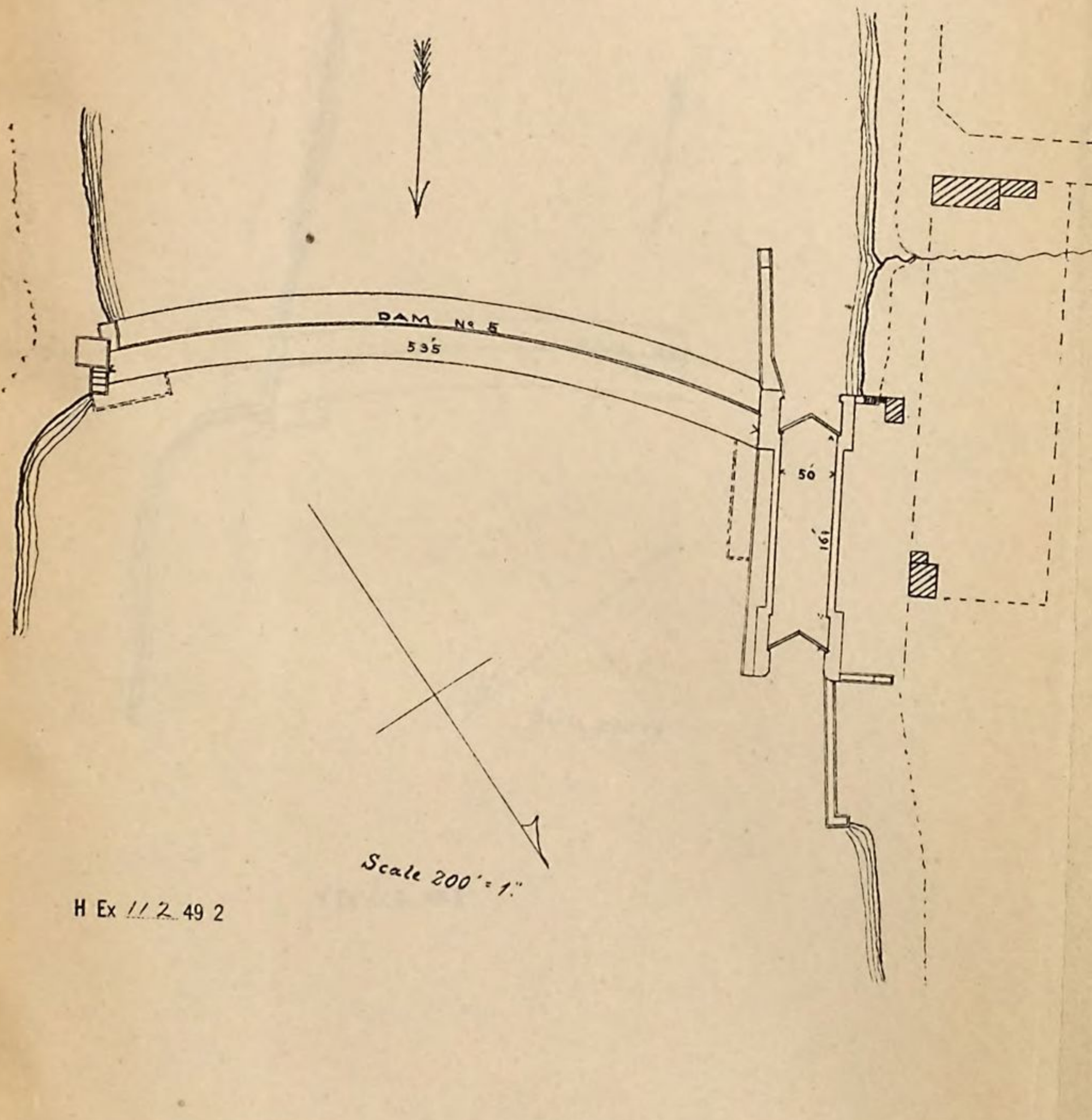




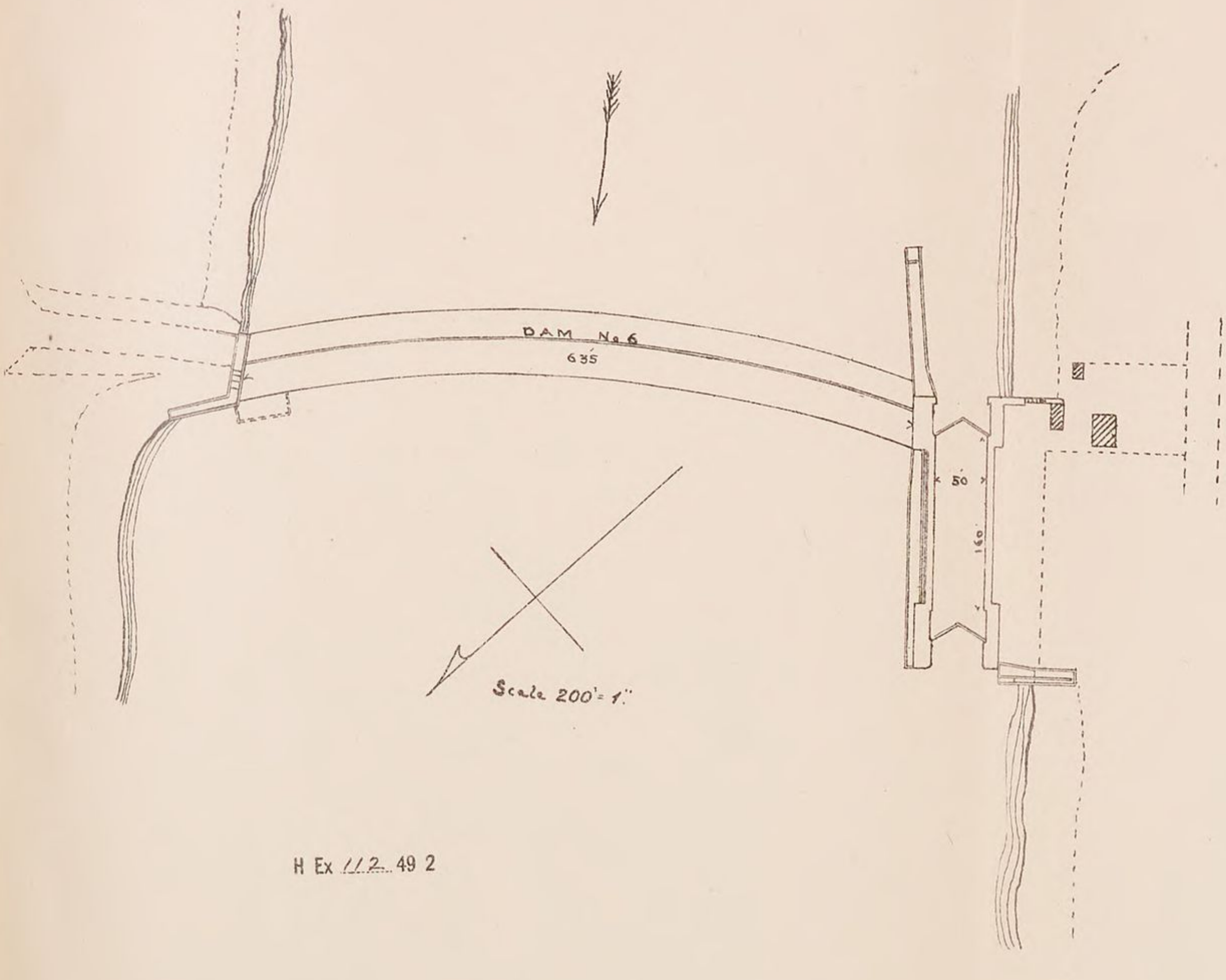
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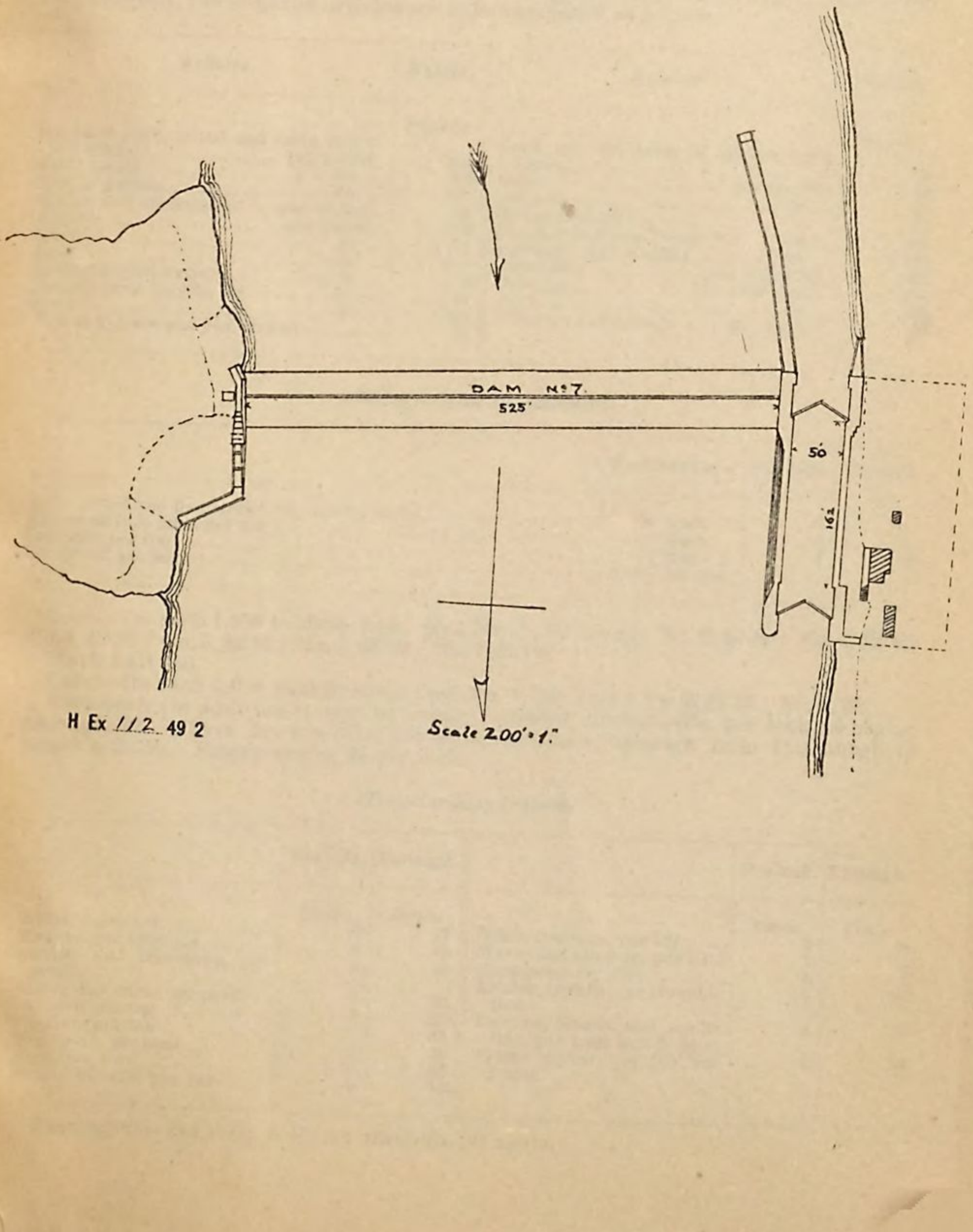




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Articles in Class No. 2.—Agricultural products, not specified; agricultural implements, ale, beer, and porter, anvils, apples, blooms, butter, bacon, and beef; chair stuff, turned; copperas, coffee, copper ore, cheese, cotton and cotton yarns, castings, cider, dried apples and peaches, doors and blinds for steamboats, &c., earthen and stone ware, empty whisky, ale, and oil barrels; empty flour, apple, and salt barrels; fish, flax and other seeds; flour, groceries, not specified; glauber salts, ginseng, hemp, oakum, and flax; hides, green and salted; iron, rolled and hammered; lard and tallow, molasses; marble, sawed and in blocks; nails and spikes, ropes and cordage, pork, powder, pitch, tar, rosin and turpentine, rags, saleratus, saltpeter, tobacco leaf, wool, window glass, buggies, small wagons, &c., carriages and wagons.

Articles in class No. 3.—Ashes, pot and pearl, and scorchings; cut stone, fire brick, grind and mill stones and burr blocks, German clay and gypsum, hydraulic cement; lead, in pigs and bars; salt, lath, plaster paris, paper boards, scraps and broken castings, Spanish whiting and barytes, wheat and other grain, white or Louisville lime, soda ash, potatoes and turnips, old cordage, shingles, hay and straw.

All articles not above enumerated to be classed in Class No. 2.

In the collection of tolls, all articles to be charged at their exact weight; but when not weighed, the annexed articles are to be computed as follows:

Articles.	Weight.	Articles.	Weight.
	Pounds.		*Pounds.*
Beef and pork, salted, and rosin, oils of all kinds.....per barrel..	300	Corn, rye and seeds of all kinds, per bushel.....	56
Fish, salted .....do....	300	Oats .....per bushel..	30
Tar, 28 gallons.....do....	320	Wheat.....do...	60
Barley and buckwheat ....per bushel..	45	Oysters (shell)..... do....	75
Apples .....per barrel..	100	Buggies and small wagons..... each..	850
Flour.....do....	170	Carriages and wagons ..... do...	1,700
Cider .....do....	200	Fire brick .....per 100 count..	400
Empty (tight) barrels .....do ..	70	Shingles.....per 1,000 count..	500
Empty flour barrels, &c..... do....	40	Lath .....do....	400
Salt.....do....	250	Potatoes and turnips .....per bushel..	56
Window glass, per box, 50 feet.....	42		

Articles carried in quantities.

	Not less than—	Per lock.	Through.
Iron, rolled and hammered, per 1,000 pounds..... ..	50 tons.	5	.....
Steel and iron rails, per ton	100 tons.	6	.....
Iron ore, per ton	100 tons.	3	25
Crude oil, per barrel	1,000 barrels.	.....	7

Coal.—On each 1,000 bushels, from pool No. 1, 90 cents; No. 2, $1.80; No. 3, $2.45 No. 4, $2.65: No. 5, $2.85; No. 6, $3.05; No. 7, $3.05.

Slack half toll.

Coke.—On each 1,000 bushels, from pool No. 1, 75 cents; No. 2, $1.35; No. 6, $2.

Steamboats (in addition to toll on cargo).—Below Brownsville, per lock, 50 cents; through, $2. Above Brownsville, per lock, 75 cents; through from Pittsburgh to Geneva, $3.50. Empty crafts, $1 per lock.

Miscellaneous articles.

	Per lock.	Through.		Per lock.	Through.
	Cents.	*Cents.*		*Cents.*	*Cents.*
Whisky, per bbl.....	3	15	Brick, common, per 100.....	2	10
Manure, per 1,000 lbs.....	3	12	Staves and heading, per 100..	1	6
Rubble and limestone, per perch.	3	18	Hoop-poles per 100.....	1	6
Dimension stone, per perch...	5	30	Timber, in rafts, per 100 cubic feet.	6	36
Iron ore, per ton	5	25	Lumber, boards, and scantling, per 1,000 feet B. M.	8	48
Pig-iron, per ton	7	40	Frame timber, per 100 feet linear.	6	36
Fire-wood, per cord..... .	6	36			
Bark, per cord	10	60			
Posts and rails, per 100	6	36			

Passeng·rs—Per lock, 5 cents; through, 30 cents.

Classed freight, per 1,000 pounds.

	Below Brownsville, per lock.	Above Brownsville, per lock.	Through.
	Cents.	*Cents.*	*Cents.*
Class No. 1	6	8	40
Class No. 2	5	6	30
Class No. 3	4	5	26

Live stock.

	Below Brownsville.	Above Brownsville or through.
	Cents.	*Cents.*
Sheep, per head	4	4
Hogs and calves, per head	5	7
Cattle and horses, per head	20	30

All passengers and freight carried in any boat on the pools, to and from points between locks, shall be returned and paid as other way passengers and freight for one lock; and all boats or crafts using the pools of the navigation for loading, or in the transaction of their regular business, that during high water pass over Dam No. 1, shall pay the same toll as if they passed through the lock.

No additional toll to be charged on boats laden exclusively with coal, coke, cordwood, brick, lime, limestone, rough stone, or sand.

M. K. MOORHEAD,
President.
WM. BAKEWELL,
Secretary.
W. P. WOOD,
Carg Inspector.

APPENDIX 2.

MEMORIAL ADDRESS TO CONGRESS BY PITTSBURGH CHAMBER OF COMMERCE, RELATING TO COMMERCIAL IMPORTANCE OF MONONGAHELA RIVER, AND URGENT NECESSITY OF MAKING THE SAME A FREE HIGHWAY OF COMMERCE; ALSO, APPRAISAL OF WORKS BY S. WAINWRIGHT, CONSULTING ENGINEER.

To the Senate and House of Representatives of the Congress of the United States of America:

The Chamber of Commerce of Pittsburgh respectfully presents as follows:

Pittsburgh is the commercial head of the systems of the navigable waters of the Ohio basin, the wealthiest and most populous portion of the Mississippi valley, and is recognized by such competent authority as General Francis A. Walker, Hon. Joseph Nimmo, jr., and General Godfrey Weitzel, who, in a special report to the Chief of Engineers, U. S. Army, dated February 10, 1882, says: "The Ohio River basin, according to the census of 1880, still maintains its supremacy over any other portion of the great Mississippi basin. It still yields enormous quantities of iron, steel, coal, petroleum, wheat, corn, oats, salt, and tobacco, and its numerous manufacturing interests are on a steady and healthy increase."

The Ohio basin contains a population of about 8,000,000 inhabitants, and the eight States which, in part or in whole form this basin, paid into the Treasury of the United Statrs during the fiscal year ending June 30, 1881, $87,500,000 of internal revenue, and in other years approximate sums, more or less.

These and other reliable statistics that might be submitted demonstrate the injustice done to the Ohio River interests by the Government, when compared with districts receiving large annual appropriations for improvements.

The vast interests of the Ohio and Mississippi valleys are interested in cheap fuel for manufacturing and domestic uses, and, as affecting this supply, your petitioners beg to submit the following facts.

First. That in the year 1836 the Commonwealth of Pennsylvania granted and gave unto the Monongahela Navigation Company, a corporation created under and by virtue of the powers of said State, the exclusive right and authority to improve the Monongahela River by the construction and maintenance of locks and dams, thereby giving and granting unto said Navigation Company the entire control of said river; and in addition thereto, giving to the said corporation the right to collect and exact tolls from boats and crafts of every description navigating said stream, based upon the tonnage and value of their respective cargoes.

Second. That since the time the rights and privileges hereinbefore mentioned were granted to the said Navigation Company, the business transacted in said valley has ncreased enormously in volume, especially through the development of the bituminous coal industry.

Third. That since the year 1844 the bituminous coal business has been growing in size, until the tonnage of the coal passing through the locks of the said Navigation Company during the year 1883 amounted to the total sum of over 108,000,000 bushels, or about 4,000,000 tons; and but for the toll exacted by the said Navigation Company, and the insufficient facilities afforded shippers, the gross tonnage would have probably exceeded largely that amount. During the year 1848 the freight and passenger traffic exceeded the bituminous coal interests $31,747.07, and since that time the latter interests have grown so large, that in the past year (1883) they exceeded the freight and passenger traffic by $202,212.88. The improvements placed on dam and lock No. 1 during 1848, when the total receipts at all locks amounted to $56,623.93, have been made to serve the interests, with no additional facilities or improvements, to the present time, when (during 1883) the receipts amounted to $279,023.56. These tolls assume the nature and force of an export tax equal to 7 cents per ton. That the locks, dams, and other works of the said Navigation Company are now wholly insufficient for the traffic on the river.

Fourth. That since the completion of the improvements of the Kanawha River by the Government of the United States, whereby bituminous coal mined from the valley of said river can be shipped to market by water without the payment of toll for passing through the locks built on said river, the said Kanawha River coal has appeared in the markets of Cincinnati, Louisville, New Orleans, and other Southern and Western cities as a competitor, which, unless the relief hereinafter prayed for is granted, threatens the entire bituminous coal business in the Monongahela Valley.

Fifth. The principal portion of the coal mined and shipped from the Monongahela Valley passes through four locks. The tolls, as now exacted by the Monongahela Navigation Company, are as follows: On each thousand bushels of coal passing down through the four locks, $2.65; and through the three locks, $2.45; and through the two locks, $1.80; and through the first lock, 90 cents. In addition to this is the toll on steamers and empty crafts up-stream, ranging from 50 cents to $1 each at every lock. As per above statement it will be found the lockage on coal alone passing through the four locks amounts to within a fraction of 7 cents per ton, and estimating the entire amount of coal run through Lock No. 1 during the past year, amounting to 108,000,000 bushels, as being produced equally in the four pools, would amount to over $210,000.

Sixth. That, notwithstanding the increase of traffic to meet the wants of increased populations, the same narrow and insufficient passage-ways exist to-day on a considerable portion of this improvement as existed forty years ago, and what improvements the said company has since made are inadequate to accommodate the increased business. Hence, at Lock No. 1, tow-boats, fully manned with crews and with steam up, have frequently to wait for twenty-four hours, and often forty-eight hours, before they can be passed through said locks.

Seventh. On the Monongahela River, one of the main sources of coal supply for the Ohio and Mississippi Valleys, a peculiar condition of affairs has arisen. The Monongahela Slack-Water Works extend to the West Virginia State line. The increased demand from the South and West for the valuable coal found in this valley, backed by a desire of the people of West Virginia to secure trade communication with the South and West by means of navigable waters, induced the Federal Government to undertake the extension of the slackwater system to Morgantown. Accordingly, the Government has completed one lock and dam in the State of West Virginia on said river. The partial exhaustion of coal in the lower pools of the Monongahela, the tolls charged by the Monongahela Slackwater Navigation Company work to the detriment of the coal fields of the upper Monongahela and West Virginia. Hence the citizens of West Virginia are prevented by the existence of a private corporation from reaping the legitimate advantages which they should from improvements made by the authority of the Federal Government. It is certainly an anomalous condition of affairs that a private corporation imposes a tax on commerce midway on one of the highways of the nation between improvements made by the authority of the nation. The result of the improvement of the Ohio above and below Louisville, Ky., enforced the purchase of the canal and locks at that point, at a cost to the United

States, including improvements, of $2,600,000, thus removing the embargo of high tolls from the commerce of the Ohio and Mississippi rivers.

Your memorialists earnestly urge, in view of the importance of the trade of the Monongahela River to the entire Mississippi basin, that early proceedings be instituted by your honorable bodies to secure full and absolute control of the navigation of said Monongahela River; that it may be declared a free highway of commerce for the common use and benefit of all the people of the United States. We are encouraged in making this request by the action of Congress in providing for the improvement of the Great Kanawha River, in making it a free highway. Equity demands a like action on behalf of the commerce of the Monongahela River. The act of Congress providing for operating and maintenance and repairs of the locks and dams of the improvement of the Great Kanawha River provides as follows, viz: "That the locks and dams of the improvement of the Great Kanawha River, and the property appertaining thereto, shall be held for the common use and benefit of the people of the United States; free of all tolls and charges except such as are necessary to pay current expenses of said locks and dams, to keep said locks and dams and the property appertaining thereto in repair, and to provide for the full and complete use and benefit of said improvement." Subsequently, Congress directed the cost and maintenance to be paid from the regular appropriation, thus providing for *free commerce*. The appropriations for this improvement up to and including 1882, are $1,542,000. To complete the work as projected, $2,050,000 is required—total, $3,592,000. There are now in operation on the Kanawha River, extensive coal mines, shipping annually millions of bushels of coal to the same markets as coal from the Monongahela River—the former free—the latter subjected to heavy toll charges. Hence, in consequence of Government aid, Kanawha coal arrives at market at less cost than coal from Western Pennsylvania and West Virginia, bordering on the Monongahela. This is not equity between States. We make no complaint against the aid extended to Kanawha interests, but ask for like aid for precisely the same interests. Nor do we ask for aid for local interests—the entire population of the Mississippi basin is concerned in the object of this memorial.

To sum up our case in a single sentence, as the products of the Monongahela Valley have precisely the same relation to the Mississippi Valley as the products of the Kanawha Valley, we ask Congress to do for us what it has done for our neighbors. Therefore, your petitioners pray your honorable bodies for relief as follows:

(1) That Congress, by appropriate action, provide for such a system of improvements by the erection of dams and other works on the Monongahela River as will meet the requirements of commerce, and enable the resources of the Monongahela Valley to be fully developed.

(2) That Congress will take such action looking to the purchase of said works, as will at once secure the navigation of the Monongahela River free to all persons desiring to use its waters.

JOHN F. DRAN,
President.

[SEAL]

G. FOLLANSBEE,
Superintendent.

PITTSBURGH, PA., *December* 15, 1884.

PITTSBURGH, *January* 14, 1887.

GENTLEMEN: We herewith submit for your consideration a report and appraisal of the works of the Monongahela Navigation Company, prepared for the coal and river interests by Mr. S. Wainwright, consulting engineer, of Pittsburgh, Pa.

Will you please insert the same in your records as a part of our case.

Yours, respectfully,

SAM'L S. BROWN,
Chairman of Committee.

Maj. W. R. KING,
Maj. AMOS STICKNEY,
Maj. ALEX. MACKENZIE,
Board of Engineers on Appraisal of Works of the Monongahela Navigation Company.

No. 111 FOURTH AVENUE,
Pittsburgh, Pa., January 14, 1887.

GENTLEMEN: In accordance with your instructions to me on Wednesday, December 22, 1886, I on that date proceeded to measure up and make an appraisal of the plant of the Monongahela Navigation Company, a corporation of the State of Pennsylvania, operating a system of slackwater navigation on the Monongahela River,

from Pittsburgh to the Virginia State line, a distance of about 90 miles. The service is performed by four double locks and three single locks, with their accompanying dams, located as follows:

Lock No. 1 (double),located at South Eighteenth street, in the city of Pittsburgh.
Lock No. 2 (double), located at Port Perry, about 11 miles above Lock No. 1.
Lock No. 3 (double), located 1½ miles above Elizabeth, about 13 miles above Lock No. 2.
Lock No. 4 (double), located about 3 miles below Belle-Vernon and about 16 miles above Lock No. 3.
Lock No. 5 (single), located about 4 miles above Brownsville and about 21 miles above Lock No. 4.
Lock No. 6 (single), located at Rice's Landing and about 7 miles above Lock No. 5.
Lock No. 7 (single), located at Geneva, about 15 miles above Lock No. 6.

The time allowed by you for the proper survey and estimate of the plant was very short. I was also further retarded by the extreme cold weather, which rendered it somewhat difficult to get around to the various locks with any speed. However, by organizing two parties I have been enabled to make a complete survey and measurement of all the locks and dams, careful triangulations being made to ascertain accurately the length of each dam. All of the plant in sight was carefully measured, and the quality of the work noted. The portions under water were carefully sounded, and inquiries made from parties who were connected with the construction of the work and others who lived in the vicinity during the time of construction, all of which enabled me to approximate very closely the actual quantities in the work. The prices applied are the fair, ordinary contract prices for similar work in this vicinity.

I herewith give you a tracing showing the plan of each set of locks and dam, with the estimated appraisal of the same. This appraisal is, in my opinion, the price or cost of constructing the plant new at the present time and of the dimensions now existing.

Lock No. 1.

Lock No. 1 is located on the right bank of the Monongahela River, in the city of Pittsburgh (Sixth ward). There are two locks, the outer one next to the river, the inner next the shore.

	Outer lock (constructed 1841).	Inner lock (constructed 1848).
	Feet.	*Feet.*
Lift of lock	10	10
Width of chamber in the clear	50	56
Length of chamber in the clear	158	215
Total length of walls	250	320
Height of walls above sill	23	23

The machinery for operating gates on the shore and middle walls is worked by steam-power, there being a steam-engine on each, but steam for the engine on middle wall is carried from the boilers on shore by a steam-pipe supported by an iron structure crossing the 56-feet lock overhead; the machinery for gates on outer wall by a flutter-wheel in the end of dam.

Total length of dam 960 feet, of which about half is 40 feet in height, the remainder 25 feet, and the width about 56 feet.

Real estate consists of four-tenths of an acre fronting on Second avenue, with two brick dwellings, 2½ stories high each; 1 double dwelling (these buildings about 30 by 22 feet each); 1 frame boiler and engine-house, 34 by 27 feet; 1 frame office 1½ stories, 35 by 15 feet; 1 engine-house (frame), 30 by 16 feet; 1 shed (frame), 25 by 12 feet; 1 shed frame, 12 by 10 feet; 1 hut frame, 10 by 8 feet.

40,000	cubic yards excavation, including all pumping, bailing, and coffer-dams, at 60 cents			$24,000 00
14,000	cubic yards dredging, at 50 cents			7,000 00
10,010	cubic yards masonry in lock walls, at $11	$110,110 00		
71	cubic yards rubble masonry in retaining walls, at $4	284 00		
				110,394 00
725,000	feet, B. M., timber (hemlock) in lock foundation, at $25			18,125 00
14,000	feet B. M., timber in sheet pling, at $35 cents	$490 00		
980,900	feet B. M., timber in crib-work, at $25	24,522 50		
5,616	feet, B. M., timber in sheeting on cribs, at $30	168 48		
				25,180 98

5,480	feet, B. M., timber in joists and floor beams, at $50 ..	$274 00	
9,100	feet B. M., timber in flooring between walls, at $35...	318 50	
			$592 50
8,486	cubic yards stone filling in cribs, at $1.50		12,729 00
58,776	pounds iron in crib-work, at 5 cents	2,938 80	
24,480	pounds iron beams, carrying floor and shafting, at 5 cents	1,224 00	
			4,162 80
480	feet dam, 40 feet high, at $205	98,400 00	
480	feet dam, 25 feet high, at $109	52,320 00	
			150,720 00
2	pairs of wooden gates for 50 feet lock and wickets	6,000 00	
2	pairs of wooden gates for 56 feet lock and wickets .	8,000 00	
			14,000 00
	Machinery: 1 water-wheel (flutter-wheel), working 2 gate-machines, 2 capstans; 1 two-cylinder horizontal engine (middle wall) works 4 gate-machines, 4 capstans; 1 one-cylinder horizontal engine (shore wall), works 2 gate-machines, 2 capstans; 1 one-cylinder horizontal engine, automatic cut-off for electric lights; 1 dynamo and 2 arc lights on high poles; 1 locomotive-boiler, 1 vertical boiler, 1 steam-pump, bridge carrying steam-pipe over 56-feet lock to engine on middle wall		10,000 0
	Real estate, four-tenths acre at lock 1 on second avenue, Pittsburgh		6,000 00
	Buildings:		
	1 brick dwelling, 2½ stories, 30 by 28 feet	$3,000 00	
	1 brick dwelling, 2½ stories, 30 by 22 feet	2,000 00	
	1 brick double dwelling, 2½ stories, 32 by 32 feet	2,000 00	
	1 frame boiler and engine-house, 34 by 27 feet	600 00	
	1 frame office, 1½ stories, 35 by 15 feet	600 00	
	1 frame engine-house, 30 by 16 feet	400 00	
	1 frame shed, 25 by 12 feet	150 00	
	1 frame shed, 12 by 10 feet	60 00	
	1 frame hut, 10 by 8 feet	50 00	
			8,860 00
			391,764 28

Lock No. 2.

Lock No. 2 is situated on the right bank of the Monongahela River, at Port Perry, in North Versailles Township, Allegheny County, Pennsylvania.

There are two locks, the outer one next the river, the inner next the shore.

	Outer lock (constructed 1841).	Inner lock (constructed 1854).
	Feet.	*Feet.*
Lift of lock	8 2/10	8 2/10
Width of chamber in the clear	50	56
Length of chamber in the clear	158	215
Total length of walls	252	320
Height of walls above sills	23	23

The machinery for operating gates on the middle wall is worked by steam power; that for the gates on the shore wall by a turbine; and that for the gates on the outer wall by a flutter-wheel on the end of the dam.

Total length of dam, 910 feet; of this one-half is 40 feet high, the rest about 25 feet.

The real estate consists of 1 lot at Port Perry of seventeen one-hundredths acres; 1 two-story brick residence, 57 by 24 feet; 1 frame storehouse, 44 by 17 feet; 1 two-story frame office, 30 by 15 feet; 1 engine-house, 45 by 10 feet; coal shed, 30 by 9 feet; 2 huts, 12 by 9 feet; 2 huts, 7 by 7 feet; 1 hut, 6 by 5 feet.

26,000	cubic yards excavation, including all pumping, bailing, and coffer-dams, at 60 cents		$15,600 00
9,000	cubic yards dredging, at 50 cents		4,500 00
8,883	cubic yards masonry in lock walls, at $11		97,713 00
698,200	feet, B. M., timber in lock foundation (hemlock), at $25		17,455 00
12,700	feet, B. M., timber in sheet-piling, at $35	$444 50	
622,400	feet, B. M., timber in crib-work, at $25	15,560 00	
37,900	feet, B. M., timber in sheeting on pile-crib, at $30	1,137 00	
1,972	feet, lineal, of 18-inch piles, at 75 cents	1,479 00	
			18,620 50

7,080	feet, B. M., timber in bracing and floor beams, at $50..	$354 00	
5,686	feet, B. M., timber in flooring between walls, at $35...	199 01	
			$553 01
6,741	cubic yards stone filling in cribs, at $1.50		10,111 50
37,200	pounds iron in crib-work, at 5 cents		1,860 00
455	feet dam, 40 feet high, at $205	93,275 00	
455	feet dam, 25 feet high, at $109	49,595 00	
			142,870 00
2	pairs of wooden gates for 50-foot locks and wickets...	6,000 00	
2	pairs of wooden gates for 56-foot locks and wickets...	8,000 00	
			14,000 00
Machinery: 1 water-wheel (flutter-wheel) works 2 gate machines, 2 capstans; 1 turbine (shore wall) works 2 gate machines, 2 capstans; 1 two-cylinder vertical engine (middle wall) works 4 gate machines, 2 capstans; 1 horizontal boiler, 48 inches by 24 feet, two flues; 1 small vertical boiler, 1 steam pump			8,000 00
Seventeen-hundredths acre lot at Port Perry			1,200 00
1	brick dwelling (2-story), 57 by 24 feet	$2,500 00	
1	frame storehouse, 44 by 17 feet	400 00	
1	frame office (2-story), 30 by 15 feet	300 00	
1	frame engine-house, 45 by 10 feet	300 00	
1	frame coal shed, 30 by 9 feet	150 00	
5	frame huts (two, 12 by 9 feet; two, 7 by 7 feet; one, 6 by 5 feet)	150 00	
			3,800 00
	Total		336,283 0

Lock No. 3.

Lock No. 3 is situated on the right bank of the Monongahela River, in Forward Township, Allegheny County, Pennsylvania, about 2 miles up the river from the town of Elizabeth. There are two locks, the outer one next to the river, the inner next the shore.

	Outer lock (constructed 1844).	Inner lock (constructed 1883).
	Feet.	*Feet.*
Lift of lock	11 4/10	11 4/10
Width of chamber in the clear	50	56
Length of chamber in the clear	160	278
Total length of walls	252	380
Height of walls above lower sills	23	23

The machinery for operating gates on the shore and middle walls is worked by a turbine in the space between the walls of old and new locks, shafting being carried across the 56-foot lock in a passage under the floor of the lock, but there is also an auxiliary turbine on the shore wall for operating the gates there if required; the machinery on the outer wall is operated by a flutter wheel in the end of the dam.

Total length of dam, 680 feet; of which about 150 feet is 35 feet high, the rest about 25 feet high.

The real estate consists of 1 (two-story and attic) brick residence, 34 by 24, with frame kitchen, 16 by 16, and larder, 12 by 14; 1 shed, 30 by 14; 1 frame office (two-story), 28 by 22; 1 frame workshop, 37 by 13, with shed addition, 30 by 12; 1 frame barn, 38 by 24, and 1 frame office on lock wall, 16 by 10, 2.89 acres of land, 2.21 acres being bottom land below road, the rest steep hill-side.

46,000	cubic yards excavation, including all pumping, bailing, and coffer-dams, at 60 cents		$27,600 00
14,000	cubic yards dredging, at 50 cents		7,000 00
4,696	cubic yards masonry in old lock-walls, at $10.50 ...	$49,308 00	
6,795	cubic yards masonry in new lock-walls, at $11.50...	78,142 50	
26	cubic yards rubble masonry retaining-wall, at $4...	104 00	
			127,554 50
307,200	feet, B. M., timber in foundation of old lock (hemlock), at $25	7,680 00	
510,720	feet, B. M., timber in foundation of new lock (hemlock), at $25	12,768 00	
			20,448 00

42,000	feet, B. M., timber in raised platform, up end new lock (oak), at $50		$2,100 00
13,500	feet, B. M., timber in sheet-piling, at $35	$472 50	
937,500	feet, B. M., timber in crib-work, at $25	23,437 50	
35,600	feet, B. M., timber in sheeting on cribs and piles, at $30	1,068 00	
1,224	feet, lineal, 18-foot piles, at 75 cents	918 00	
			25,896 00
7,200	feet, B. M., timber in bracing and floor beams, at $50	360 00	
7,700	feet, B. M., timber in flooring between walls, at $35	269 50	
			629 50
9,400	cubic yards stone filling in cribs, at $1.50	14,100 00	
1,500	cubic yards riprap on bank, at $1.25	1,875 00	
			15,975 00
55,760	pounds iron in cribs, at 5 cents		2,788 00
150	feet dam, 35 feet high, at $175	26,250 00	
530	feet dam, 25 feet high, at $109	57,770 00	
			84,020 00
2	pairs wooden gates for 50-foot lock and wickets	6,000 00	
1	pair wooden gates for 56-foot lock and wickets	4,000 00	
1	pair iron gates for 56-foot lock and wickets	10,000 00	
			20,000 00
Machinery: 1 flutter-wheel works 2 gate machines and 2 capstans; 1 48-inch turbine works 4 gate machines and 2 capstans; 1 auxiliary turbine works 2 gate machines; shafting under 56-foot lock, carrying power from main turbine to shore gates			8,000 00
Real estate: 2.89 acres at lock No. 3 (2.21 acres of this is bottom land below road; the rest is steep hill-side)			500 00
1	brick residence (2-story and attic), 34 by 24 feet, with frame kitchen, 16 by 16 feet, and larder 12 by 14 feet	$2,000 00	
1	shed, 30 by 14 feet	300 00	
1	frame office (2-story), 28 by 22 feet	800 00	
1	frame workshop, 37 by 13 feet, with addition, 30 by 12 feet	450 00	
1	frame barn, 38 by 24	400 00	
1	frame office on lock wall, 16 by 10 feet	100 00	
			4,050 00
Total			346,561 00

Lock No. 4.

Lock No. 4 is located on the left bank of the Monongahela River in Fallowfield Township, Washington County, Pennsylvania, and about 2½ miles down the river from the town of Belle Vernon. At this place there are two locks, the old and the new, the latter being next to the shore.

	Old lock (constructed 1844).	New lock (constructed 1886).
	Feet.	*Feet.*
Lift of the lock	$8\frac{9}{10}$	$8\frac{9}{10}$
Clear width of chamber	50	56
Clear length of chamber	161	226
Total length of walls	$252\frac{8}{10}$	$329\frac{1}{3}$
Height of wall above lower miter-sill	$23\frac{1}{10}$	$25\frac{8}{10}$

Timber foundations extend under the entire length and breadth of both the old and the new locks.

An undershot wheel at the dam furnishes the motive power for working two capstans, and a friction drum, with reversible gearing, on the river wall of the old lock, by means of which the gates and wickets of the old lock are operated.

At present there is no machinery other than hand-power in use for working the gates, &c., of the new lock. Provision has been made for machinery to be operated by turbine wheels, pipes, 48-inch diameter, for conveying the water, being in position behind the walls their entire length.

The length of the dam is 608 feet; width, 56 feet; height, 20 feet.

The real estate at Lock No. 4 consists of 1 brick dwelling, 1 office, 1 cement-house, 1 ice-house, 1 blacksmith shop, 1 carpenter shop, 5 new frame tenements, about 6 acres of well improved lots and grounds, and 5 acres of unimproved land, together with 4 acres of bottom land on the right bank of the river at the end of the dam, in the adjoining county of Fayette. At Lock No 4 is the depot for supplies, materials, &c., where gates are built, and where the navigation company's working craft are harbored.

54,700	cubic yards excavation, including pumping, bailing, and coffer-dam, at 60 cents		$32,820 00
18,500	cubic yards dredging, at 50 cents		9,250 00
4,720	cubic yards masonry in old lock, at $9.50	$44,840 00	
8,000	cubic yards masonry in new lock, at $11.50	92,000 00	
			136,840 00
900	cubic yards paving behind lock-wall, at $2.50		2,250 00
1,100	cubic yards riprap at abutment E. E. of dam, at $1.25		1,375 00
320,000	feet (board measure) timber in foundations of old lock (hemlock), at $25	$8,000 00	
650,000	feet (board measure) timber in foundations of new lock (hemlock), at $25	16,250 00	
			24,250 00
52,800	feet (board measure), timber in platform of new lock, at $50		2,640 00
214,200	feet timber in crib abutment E. E. of dam; 90,000 feet in crib submerged at E. E. of dam; 175,400 feet in crib at upper end of river wall; 150,100 feet in first crib on outside of river wall; 163,200 feet in second crib on outside of river wall; 81,600 feet in third crib on outside of river wall; 24,100 feet in wing crib at lower end new lock; 240,100 feet in river crib at lower end new lock; 220,000 feet in crib at upper end of new lock; 114,500 feet in 3 crib at upper end of gateyard; 13,900 feet in fender at upper end of river wall; total, 1,487,100 feet (board measure), at $25		37,177 50
10,600	feet (board measure) timber in sheeting and floor of crib, upper end of new lock, at $30		318 00
20,000	feet (board measure) timber in bridges, platforms, &c., connecting lock-walls, at $35		700 00
97,200	pounds iron in crib work, &c., at 5 cents		4,860 00
22,200	cubic yards stone filling in cribs, at $1.50		33,300 00
608	feet (linear) dam, 56 feet wide, 20 feet high, at $76		46,208 00
2,200	feet (linear) 18-inch piles, at 75 cents		1,650 00
1,000	cubic yards concrete in foundation of new lock, at $6		6,000 00
4	gates, wickets, &c., of old lock	$6,000 00	
4	gates, wickets, &c., of new lock	8,000 00	
			14,000 00
	Machinery: Flutter-wheel and machinery for operating old lock; 600 feet (linear) 48-inch iron pipe for turbines, new lock		3,500 00
	Real estate, &c.:		
	1 office (frame); 1 cement-house (frame); 1 blacksmith shop (frame); 1 coal-house (frame); 1 ice-house (frame); 1 brick dwelling-house; 5 new frame dwellings; 1 carpenter shop (frame)		6,000 00
	6 acres improved ground, lots, &c.; 5 acres unimproved ground; 4 acres land on east side of river		2,000 00
	Total		365,138 50

Lock No. 5.

Lock No. 5 is located on the left bank of the Monongahela River, in Bethlehem Township, Washington County, Pennsylvania, and about 2½ miles up the river from the town of Brownsville.

	Feet.
Lift of the lock	$12\frac{3}{10}$
Clear width of chamber	50
Clear length of chamber	161
Total length of walls	255
Height of wall above lower miter-sill	$26\frac{7}{10}$

Date when constructed, 1856.

Timber foundation extends under the entire length and breadth of the lock and walls. No machinery is used at this lock, excepting hand-power winches for operating the gates and wickets.

The length of the dam is 595 feet, of which 200 feet is 56 feet wide and 30 feet high, the remaining 395 feet being 56 feet wide and 20 feet high.

The real estate consists of a one-acre lot with dwelling-house and stable and an office. The Navigation Company has no lands on the east or right bank of the river at this lock.

15,600 cubic yards excavation, including pumping, bailing, and coffer-dams, at 60 cents		$9,360 00
6,700 cubic yards dredging, at 50 cents		3,350 00
6,202 cubic yards masonry, at $9.50		58,919 00
6 cubic yards rubble masonry of wing shore-wall, at $4		24 00
682 cubic yards paving behind shore-wall, at $2.50		1,705 00
600 cubic yards riprap at abutment at E. E. of dam, at $1.25		750 00
323,300 feet, B. M., timber in foundation under lock-walls, at $25	$8,082 50	
36,600 feet, B. M., timber in platform at head of lock, at $50	1,830 00	
		9,912 50
521,500 feet, B. M., timber in crib-work, at $25		13,037 50
3,400 feet, B. M., timber in sheeting on head of crib upper end wall, at $30		102 00
7,915 cubic yards stone filling in cribs, at $1.50		11,872 50
28,100 pounds iron in cribs, at 5 cents		1,405 00
5,700 pounds iron in foundation of lock and platform, at 5 cents		285 00
200 feet, linear, dam, 56 feet wide, 30 feet high, at $139	$27,800 00	
395 feet, linear, dam, 56 feet wide, 20 feet high, at $67	30,020 00	
1,800 feet, linear, piles below dam, at 50 cents	900 00	
		58,720 00
4 lock-gates and sets of wickets		6,000 00
8 hand-power winches		150 00
1 dwelling-house and lot, 1 office, 1 stable, and outbuildings		2,900 00
Total		178,492 50

Lock No. 6.

Lock No. 6 is located on the left bank of the Monongahela River, in Jefferson Township, Greene County, Pennsylvania, at the village of Rice's Landing.

	Feet.
Lift of the lock	11
Clear width of chamber	50
Clear length of chamber	160
Total length of walls	255
Height of wall above lower miter-sill	27

Date when constructed, 1856.

Timber foundation extends under the entire length and breadth of the lock and walls.

No machinery is used at this lock, excepting hand-power winches for operating the gates and wickets.

The length of the dam is 635 feet, of which about 425 feet is 45 feet in height, and the remaining 210 feet is 20 feet in height; the width of the dam is 60 feet.

The real estate consists of one dwelling-house, one office, and one stable, with village lot and grounds, at the lock.

14,400 cubic yards excavation, including pumping, bailing, and coffer-dams, at 60 cents		$8,640 00
5,600 cubic yards dredging, at 50 cents		2,800 00
6,646 cubic yards masonry of lock, at $9.50		63,137 00
18 cubic yards rubble masonry, wing of shore wall, at $4		72 00
620 cubic yards paving behind shore-wall, at $2.50		1,550 00
2,300 cubic yards riprap at E. E. of dam, at $1.25		2,875 00
319,700 feet, B. M., timber in foundation (hemlock), at $25		7,992 50
36,600 feet, B. M., timber in platform, head of lock, at $50		1,830 00
3,400 feet, B. M., timber in sheeting on head of crib, at $30		102 00
437,400 feet, B. M., timber in crib-work, at $25		10,935 00
6,750 cubic yards stone filling in cribs, at $1.50		10,125 00
21,230 pounds iron in cribs, at 5 cents	$1,061 50	
4,400 pounds iron in timber foundation, at 5 cents	220 00	
1,500 pounds iron in platform, at 5 cents	75 00	
		1,356 50
425 feet, linear, dam, 60 feet wide, 45 feet high, at $2.41	102,425 00	
210 feet, linear, dam, 60 feet wide, 20 feet high, at $76	15,960 00	
		118,385 00
3,700 feet, linear, piles, below dam, at 50 cents		1,850 00
4 lock-gates and sets of winches		6,000 00
8 hand-power winches		150 00
1 dwelling-house, 1 office, 1 stable, 1 lot of ground at lock		2,500 00
Total		240,300 00

Lock No. 7.

Lock No. 7 is located on the left bank of the Monongahela River, in Monongahela Township, Greene County, Pennsylvania, and about 2 miles northward or down the river from the villages of Greensborough and Geneva.

	Feet.
Lift of the lock	10
Clear width of chamber	50
Clear length of chamber	160
Total length of walls	260
Height of wall above lower miter-sill	25

Date when constructed, 1884.

Timber foundation extends across the entire width of the lock and walls, for about 53 feet of the length at each end of lock, the floor of the lock-chamber being the natural rock. No machinery is used at this lock, excepting hand-power winches for operating the gates and wickets.

Length of dam, 525 feet; total height, 20 feet; width, 56 feet.

The real estate consists of a 1-acre lot, a frame dwelling-house, and carpenter-shop, together with about 2 acres of land at the east of the dam, Nicholson Township, Fayette County.

24,100	cubic yards excavation (part rock), including pumping, bailing, and coffer-dams, at 80 cents		$19,280 00
11,200	cubic yards dredging, at 50 cents		5,600 00
6,430	cubic yards masonry of lock, at $9.50	$61,085 00	
1,602	cubic yards masonry of abutments, at $8	12,816 00	
			73,901 00
118	cubic yards masonry rubble, retaining-wall, at $4		472 00
450	cubic yards paving, at $2.50		1,125 00
930	cubic yards riprap at east abutments, at $1.25		1,162 50
111,300	feet, B. M., timber in foundation (hemlock), at $25		2,782 50
45,300	feet, B. M., timber in platform, at $50		2,265 00
262,900	feet, B. M., timber in cribs, at $25		6,572 50
2,800	feet, B. M., timber in sheeting, at $30		84 00
4,080	cubic yards stone-filling in cribs, at $1.50		6,120 00
13,800	pounds iron in cribs, at 5 cents	$690 00	
1,300	pounds iron in foundations, at 5 cents	65 00	
2,200	pounds iron in platform, at 5 cents	110 00	
			865 00
525	feet, linear, dam, 56 feet wide, 20 feet high, at $76		39,900 00
4	lock-gates and sets of wickets		6,000 00
6	hand-power winches		100 00
1	dwelling-house, 1 carpenter shop, 1 lot at dwelling-house, 2 acres of land at east abutment		1,600 00
	Total		167,829 50

Floating plant:

1 pump-boat, with boilers and pumps; 2 combined pile-driver and crane-boats, with blacksmith shops and machine tools on board; 12 flats	$25,000
Engineering and superintendence	50,000

As the above estimate of cost represents new works entire, it is necesary to estimate the proper deductions to be made to cover the depreciation or the difference between a new plant of similar dimensions and the works in their present condition. This problem presents numerous difficulties, and however ascertained must perforce be one of judgment and experience. The exposure of works of this character to high floods of water and ice combined are more liable to produce sudden damages and injuries which are more serious than any gradual decay. All of the timber foundations of the locks, a large portion of the lock-walls, nearly all of the dams, and about one-half of the crib-work being under water are protected from decay. It is also well known that a new dam is never as safe as an old one, with proper repairs to combing and lower slope of dam; as the age of a dam increases the interstices of it are more completely filled up with silt and gravel, and the accumulations of material, drifts, dredging, &c., behind it increase; all of which tends to improve the stability of the dam and transform it from an artificial to a natural or imperishable obstruction to the action of the water.

The gates, lock-walls, and upper portion of cribs, and the machinery of the locks being the most exposed and more liable to decay than any other parts, and consequently must bear the larger part of the depreciation. After considering several ways of arriving at the proper deductions to be made for depreciation, I have made

the following estimates for deductions to determine the true value of the works at the present date.

Lock No. 1	$59,400 00
Lock No. 2	53,200 00
Lock No. 3	19,800 00
Lock No. 4	21,000 00
Lock No. 5	18,700 00
Lock No. 6	22,300 00
Lock No. 7	9,900 00
	204,300 00

SUMMARY.

Lock.	Length dam.	Height dam.	Year built.	Estimated cost, new work, January, 1887.	Deduction, account depreciation.	Actual value, January, 1887.
	Feet.	*Feet.*				
No. 1	960	25 40	1841 1848	$391,764 28	$59,400 00	$332,364 28
No. 2	910	25 40	1841 1854	336,283 01	53,200 00	283,083 01
No, 3	680	25 35	1844 1883	346,561 00	19,800 00	326,761 00
No. 4	608	20	1844 1886	365,138 50	21,000 00	344,138 50
No. 5	595	20 30	1856	178,492 50	18,700 00	159,792 50
No. 6	635	20 45	1856	240,300 00	22,300 00	218,000 00
No. 7	525	20	1884	167,829 50	9,900 00	157,929 50
				2,026,368 79	.....	1,822,068 79
Floating plant				25,000 00	.....	25,000 00
Engineering and superintendence				50,000 00	.....	50,000 00
				2,101,368 79	.....	.....
10 per cent. added for contingencies and risk				210,136 88	.....	210,136 88
Total				2,311,505 67	204,300 00	2,107,205 67

Yours, respectfully,

S. WAINWRIGHT,
Consulting Engineer.

Capts. S. S. BROWN, W. W. O'NEILL, I. N. BUNTON, and JNO. A. WOOD,
Committee River and Coal Exchange, Pittsburgh, Pa.

APPENDIX 3.

AFFIDAVITS RELATING TO NUMBER OF SHARES OF STOCK AND VALUE OF SAME.

PITTSBURGH, *December* 23, 1886.

GENTLEMEN: In addition to an explanation of the statements heretofore handed to you, we beg leave to submit the following:

The total amount of construction account, as shown by our memorial of October 11, was, as of that date, $1,821,049.89. It has been increased since then $5,021.21, making the present amount $1,826,071.10.

The present amount of our capital stock (having been increased since October 11) is 26,810 shares. To this should be added for scrip outstanding and convertible into stock, 86 shares. For construction account in excess of capital stock and scrip 9,625 shares, which would make a total capital stock of 36,521 shares.

The par value of the stock of this company is $50 per share, but its real or market value is much greater. The stock sold last week at $82 per share, but prior to the agitation of the question of the Government purchase of the works of the company, the stock sold at public auction in the city of Pittsburgh at $100 per share, and is now, in opinion of this affiant, fully worth that price, if only the uncertainty caused by the recent action of Congress were removed.

W. BAKEWELL,
Treasurer.

Maj. W. R. KING, Maj. ALEXANDER MACKENZIE, and Maj. AMOS STICKNEY,
Board of U. S. Engineers, to report on the value of the Works and Property of the Monongahela Navigation Company.

COMMONWEALTH OF PENNSYLVANIA,
City of Pittsburgh:

Before me, the subscriber, a notary public in and for said city, personally came William Bakewell, who, being duly sworn, deposes and says that he is treasurer of the Monongahela Navigation Company, and that the facts set forth in the foregoing statement are true to the best of his knowledge and belief.

W. BAKEWELL.

Sworn and subscribed this 23d December, 1886, before me,
[SEAL.]

W. B. CORWIN,
Notary Public.

COMMONWEALTH OF PENNSYLVANIA,
City of Pittsburgh, ss:

Before me, the subscriber, a notary public in and for said city, personally came James J. Donnell, who, being duly sworn, doth depose and say that he is a member of the firm of N. Holmes & Sons of the said city, bankers and brokers; that during a few years past they have purchased and sold from time to time, in the way of their business, shares of the capital stock of the Monongahela Navigation Company; that within a year past his firm sold said stock for the price of $89 per share, the par value of the same being $50 per share; that during the past week his firm sold said stock at $82 per share, and that he knows no reason for the present depreciation in the market price of said stock other than the uncertainty caused by the recent action of the Congress of the United States, looking towards the purchase of the works of the company, and that if it were not for that cause, the said stock would, in the opinion of this deponent, sell in the market for $100 per share, as this deponent is informed, and verily believes it did prior to the agitation of the question of the purchase of said works by the Government.

JAMES J. DONNELL.

Sworn and subscribed this 23d of December, A. D. 1886.
[SEAL.]

W. B. CORWIN,
Notary Public.

COMMONWEALTH OF PENNSYLVANIA,
City of Pittsburgh, ss:

Before me, the subscriber, a notary public in and for said city, personally came Alexander Bradley, who, being duly sworn, deposes and says that he is president of the Tradesmen's National Bank of Pittsburgh; that on the 10th day of September, 1884, he purchased at public auction in said city twelve shares of the capital stock of the Monongahela Navigation Company, at the rate of $100 per share, and paid for the same in cash the sum of $1,200.

ALEXANDER BRADLEY.

Sworn and subscribed this 23d December, 1886, before me.

W. B. CORWIN,
Notary Public.
[SEAL.]

APPENDIX 4.

REPORT OF CHIEF ENGINEER OF MONONGAHELA NAVIGATION COMPANY, GIVING ESTIMATES OF COST OF CONSTRUCTION OF NEW WORKS AND VALUE OF ACCESSORIES.

ENGINEER'S OFFICE, MONONGAHELA NAVIGATION COMPANY,
Pittsburgh, Pa., December 29, 1886.

SIR: You have asked me to present in writing my opinion, with the facts and data at my command, first, as to the value, on a cash basis, of the property of the Monongahela Navigation Company; second, as to the present condition of said works, of improvement, their durability, &c.; third, as to their capacity for business, &c.

FIRST, AS TO THE CASH VALUE OF THE IMPROVEMENT.

The only correct method of arriving at the value of these works would be to present an estimate of what it would cost to build them *de novo*. The locks and dams are in the river doing the work called upon them to perform, precisely in the manner of an

existing railroad, and maintained like one, in continuous operation, by renewals and repairs. The efficiency of the locks since the introduction of machinery to operate them is now much greater than ever before in their history, and there is nothing in their nature to prevent them from being kept forever in the same efficient condition. Their maintenance, &c., is the lookout of the company, and while the company's interest is so involved with their efficiency, it may be depended upon that the works will be kept up; just as before said a railroad is kept up; hence there is no way to get at the value of such a property, except as in the manner suggested.

In order to arrive at the value of the company's plant it would probably be best to have all the original plans at hand to obtain quantities; but unfortunately the early records and plans of the company have been destroyed by fires, so that it is now only possible to estimate the value of the works, using as a basis the cost of some of the more recent improvements; and present prices should, of course, rule in this matter.

The exact figures complete for only one dam and lock are known, viz, No. 7. This is the shortest dam on the river, and the lock is founded on rock, and the difficulties of its construction were very much less than those of any of the locks or dams below. It was built in 1883–'84, and cost $161,700.

The conditions at No. 6 were not greatly different, excepting that the dam is longer; to replace it complete would cost, we might estimate on the same basis, about $170,000.

Lock No. 5 was built on gravel, and extraordinary difficulties were encountered here in securing the foundations. The dam is also about 100 feet longer than No. 7 dam. A reasonable estimate for duplicating this work would be $210,000. It *might* be constructed for such an amount, but in all probability it would cost much more.

Old lock and dam No. 4 was also founded on gravel. Here, also, the dam is much longer than No. 7. When I say that I think it possible the old lock and dam might be duplicated for $220,000, I think you will agree with me that I am placing a low estimate upon it. Our new lock alongside of the old one has actually cost $204,000 to date, without any part of the dam entering into its cost. When entirely finished, as it will be next spring, new lock 4, with its machinery, will have cost $210,000. However, for double lock No. 4, with dam, in this estimate I will put down $404,000.

Double lock No. 3 and dam. At this place the new lock completed two years ago cost $220,000. It rests on a soft gravel bottom. The old lock and dam might possibly be duplicated for $220,000. We might say, therefore, for the whole $440,000. A statement recently presented and furnished the United States engineers gives the dimensions of all the locks here referred to.

Double locks and dams No. 2 might be duplicated for somewhat less than No. 3. Just how many thousands of barrels of cement were required here after the completion of the locks, to secure the work, I do not know; eight or ten thousand, I think. Nothing of this sort is, however, included in the cost of these works. I merely mention the matter as a reminder of the treacherous nature, as a rule, of the bed of the Monongahela River. Our company has paid some hundreds of thousands of dollars for finding it out, and where such extraordinary repairs have been made the cost should really be charged to construction, and not, as our company has done in the past, to repair accounts. My estimates, therefore, of cost of duplicating our works, except in the case of repairs of breaches in dams (which I include in construction) are made on the basis that apparently solid gravel is safe to found upon, and that good luck attends the progress of the work. I would say, therefore, for No. 3, $425,000.

DOUBLE LOCKS AND DAM NO. 1 AT PITTSBURGH.

The locks rest on rock, but the dam is on gravel, which, at the end opposite the lock, is 40 feet below low-water surface. But for original construction, we may assume that the work will cost about $400,000,

This dam has twice, in different places, washed out, the scour extending to 40 feet depth to the solid rock referred to. So, also, have dams Nos. 2 and 3 washed out, where the foundation proved treacherous. In the repair of these breaches upwards of $150,000 have been spent in making broad and deep foundations. I think, therefore, it is proper to add this item to the gross cost of the works, which I here recapitulate:

Locks and dam—	Cost.	Locks and dam—	Cost.
No. 1	$400,000	No. 6	$170,000
No. 2	425,000	No. 7	161,700
No. 3	440,000	Extra on dams	150,000
No. 4	404,000		
No. 5	210,000	Total	2,360,700

The value of real estate, boats, machinery, &c., I have estimated as follows:

At Lock No. 1:	
Lot on Second avenue	$17,500
Brick dwelling, engine-house, office, &c	12,000
Steam engines and operating machinery, including service bridge for steam-pipe	10,000
At Lock No. 2:	
Real estate, brick dwelling, office, &c	12,000
Engine, turbine, and machinery	5,000
At Lock No. 3:	
Brick mansion, lot, 10 acres, more or less	10,000
Machinery	4,000
At Lock No. 4:	
Brick house and lot at lock	5,000
New buildings and lots	12,000
Remaining lots, 2 acres	2,000
Office building and 3-acre lot	2,000
Repair-shop, railroad tracks, launchway, wharf, &c	5,000
Ice-breakers (or harbor)	2,000
At Lock No. 5:	
Frame house and lot	5,000
At Lock No. 6:	
Frame house and lot	5,000
At Lock No. 7:	
Frame house, $5\frac{3}{10}$ acres	4,500
Actual cost of repair boats No. 2	20,000
Actual cost of repair boats No. 1	4,000
Flats	2,000
Pump-boat and machinery	5,000
	134,000

We have, therefore, for the total valuation of the locks and appurtenances of the Navigation Company—

Locks and dams	2,360,700
Real estate, machinery, &c	134,000
Total	2,494,700

PRESENT CONDITION OF THE WORKS.

As I have before intimated, the repairs often amount to renewals of considerable portions of the original work, and, as a rule, where changes of machinery or repairs are made, the work is left in a stronger and better condition than was the original construction. We may expect, therefore, with the continuation of this liberal policy for a few years longer, that the ratio of cost of repairs to gross income will be much less than now.

It is my opinion that the life of the locks can be indefinitely prolonged by facing the masonry, where it is exposed to much wear from boats, with oak plank bolted horizontally to vertical timbers let in the walls. One lock, so repaired twenty-three years ago, is to-day as perfect as when the work was done. I would not hesitate to recommend such a facing, up to the level of the upper pool-line, even in new locks. Experience proves that this facing will not decay; while boats, instead of grinding against it, glance or slide. However, there are not more than two locks of the eleven which are sufficiently worn at this time to justify the expense.

As for the dams, tested as some of them have been during forty years, exposed to floods and ice, they are in every case stronger and more reliable than when originally constructed. Being constantly submerged they never decay, while the usually slight damage caused by the ice in some winters, is easily repaired by new sheeting on their lower slopes. At dam No 3 last summer sheeting timbers which had been in the dam forty-two years, were found to be perfectly sound, though much worn by the attrition of ice and drift passing over them for such a long period. I have not yet seen a rotten timber in any part of the dams proper.

In section, these dams present what is sometimes called the "log cabin" plan, the lower, or apron slope being longer than the upper slope. Experience has shown that this angle (1 to 4) is well designed to throw the descending sheet of water far enough down stream to prevent it returning as an undertow, to scour or undetermine, the foundations. Steps in dams, in my opinion, by producing reactions, retard the free discharge over the weir, and create the very difficulty they are designed to obviate.

The water is shallow close up under our dams, while on the Muskingum, where the dams are provided with steps, they have several times fallen into the excavations themselves have made. Such an accident from such a cause never occurred on the Monongahela Navigation. Breaks have occurred, the result of ice gorges or from neglected leaks under the dams. In repairing them vast quantities of stone and timber have been employed, and thus the dams have become very much stronger than when originally constructed. Neither do they leak so much as formerly, due, probably, to the great quantity of dredged material which has been deposited upon their upper slopes. Hundreds of thousands of cubic yards of this material have been placed above the dams in this way, and particularly during the last fifteen years. The dredge-boat is almost in constant use in some part of the river. The dams have gradually settled deeper into the bed of the river, and must be now regarded safe against every form of danger, excepting ice gorges; and no plan of dam construction can be guaranteed safe against their irresistible force.

Having a regard for our locks and dams as a whole, and bearing in mind that the visible parts only are subject to serious wear and decay, and that this forms but a small proportion of the whole, the conclusion is reasonable that the Monongahela locks and dams are far from being in the condition of decrepitude they are asserted to be by some thoughtless persons.

AS TO THE CAPACITY OF THE WORKS.

Before the construction of the Davis Island Dam below Pittsburgh, the coal operators used our Pool No. 1 as a harbor for their loaded coal-boats; hence occurred "the rush" at Lock No. 1 complained of. With the Davis Island Dam forming a pool below this lock of ample harbor capacity, the necessity no longer exists for the crowding at this place. The capacity of the locks are, therefore, now equal to the requirements of a trade ten times as great as the present annual Pittsburgh coal trade. Certain of the coal operators have complained of these rushes at Lock No. 1 as though it was a constant occurrence, while in fact upon very few occasions did it ever happen that the delays there prevented the boats from taking advantage of the floods below. Last fall I counted 23 loaded coal-boats belonging to one operator in Pool No. 3 at one point, and this at a time when Davis Island Dam was full and our locks were comparatively idle. Why was not such a convenient period taken to lock the boats further down or into the Ohio? I have noticed the same thing at many other places. The particular landing referred to was Joseph Walton's, above Elizabeth.

In eighteen consecutive hours at Lock No. 1, 1,800,000 bushels of coal have been passed through, and in one day considerably more than 2,000,000 bushels, or 80,000 tons, which for a year of three hundred days would equal a lockage capacity of 24,000,000 tons. This statement does not convey an idea, however, of the real capacity of the locks for business, for it includes only the loaded boats descending, and takes no account of the attendant steamers and light boats which might at the same time be passing up. A steamer of several hundred tons capacity accompanies every three boats upon an average. It would be quite possible to show, therefore, if we were asked to name the "ultimate capacity" of the locks for business in both directions, that it would exceed 50,000,000 tons per annum. It would be folly, therefore, to ask the Government to expend large sums for the enlargement of the facilities of navigation on this river while the facts remain as represented. No locks in the United States are operated more quickly than are these, and whatever slight ground for complaint there has been in the past in regard to their efficiency has been entirely removed by the construction of Davis Island Dam. If the operators choose to allow their boats hereafter to accumulate in the upper pools while awaiting a rise in the Ohio they are themselves to blame if they are detained at the locks. In fifty working days these locks can pass all the business it is ever called upon to perform in one year's time.

FINAL ESTIMATE, LOCK NO. 4.

The total quantities and cost of work at Lock No. 4 up to July is as follows:

By estimate to the contractors, Drake & Stratton:

Earth excavation, 30,426 cubic yards, at 60 cents	$18,256 12
Masonry, 7,938.2 cubic yards, at $11	87,320 20
Concrete, 876.72 cubic yards, at $8	7,013 76
10,396 feet, special oak timber, B. M., at $50	519 80
60,590 feet, oak foundation timber, B. M., at $36.50	2,211 53
625,026 feet, hemlock, B. M., at $26	16,250 68
125,470 feet, pine plank, B. M., at $36.50	4,579 66
4,424 feet, sheet piling, B. M., at $36.50	161 47

825,906 feet, total timber.

Piling, 204 linear feet, at $1	$204 00
Borrowed earth, 2,685 cubic yards, at 50 cents	1,342 50
Riprap, 114½ cubic yards, at $2	229 00
Total	138,088 72
Extra labor	364 06
Total paid contractor	138,452 78

The company furnished the cement, constructed the cribs, excavated the approaches to locks, constructed the gates, wickets, anchorage-irons, &c., the cost of which is shown in the appended itemized statement charged to construction account New Lock No. 4.

Labor of company's employés as per pay-roll sheets	$12,417 02
Dredging account	13,288 75
Tow-boat service	2,170 00
Stone for filling cribs, &c	1,782 55
Iron and steel in turbine pipes, gate-irons, wickets, anchorage, bolts and spikes	6,380 88
Timber for lock-gates, cribs, penstocks, posts, &c	6,440 24
Cement, chiefly used by the contractors and furnished them free	14,396 35
Slag for crib-filling	479 96
Miscellaneous items, including railroad freights	4,074 27
Inspection and engineering properly chargeable to this particular lock	4,500 00
Aggregate of company's work	65,930 02
Paid to contractors	138,452 78
Total cost of New Lock No. 4 to date	204,382 80
Remaining to be done:	
Filling and paving between walls of new and old lock, estimated	2,000 00
Turbine wheels, shafting, and operating machinery	4,000 00
Total cost when completed	210,382 80

The above statement is a true copy of the final estimate to the contractors. The statement of the company's share of the work I extracted from the account-books without taking time to figure out the cost of particular items. Thus oak timber for gates is here included with hewn timber, used in the cribs, &c.

Respectfully submitted.

THOMAS P. ROBERTS,
Chief Engineer Monongahela Navigation Company.

M. K. MOORHEAD, Esq.,
President Monongahela Navigation Company, Pittsburgh.

APPENDIX 5.

LETTERS OF TREASURER OF COMPANY, GIVING DETAILS OF CONSTRUCTION ACCOUNT, REPAIRS, DIVIDENDS, AND ESTIMATES OF PRESENT VALUE.

PITTSBURGH, *December* 30, 1886.

GENTLEMEN: I have received from our president, Mr. Moorhead, Major Mackenzie's letter of 21st instant, asking for further information in regard to the Monongahela Navigation Company. Owing to the company having lost by fire many of the papers and books relating to the earlier years of the improvement, it is impossible to reply to all your queries with exactness of detail, although as to gross amounts our books furnish the data to answer in a general way.

Owing to the manner in which the accounts have been kept in the ledger, it is impossible to furnish "the cost of each separate structure making up the works," excepting as to the more recent structures. An account was kept entitled "construction," but the entries in the ledger and journal, as to a large portion of these entries, do not state what particular work they refer to. I have prepared a statement, which I believe to be exactly correct, and which could be made more in detail if time permitted to refer to the original vouchers; but this would involve the work of several weeks, and I understand that you are desirous of an immediate reply.

Your first query is as to "the amount of money paid by the State of Pennsylvania for the improvement, and amount paid to the State by the company; that is, the money relation of the State to the works."

The State of Pennsylvania became a stockholder in the company in 1841 to the amount of 2,500 shares of stock, for which she paid $125,000; of this amount $40,000 was paid in State stock, which was then (in 1842) so greatly depreciated that the company lost on the sale of this stock the sum of $13,748.

In the year 1843 the State, in pursuance of the policy adopted of parting with her public improvements, sold her stock in this company at public sale, and thus ceased to be a stockholder, and since that date has held no stock, and has contributed nothing, in money or otherwise, to the company.

Since its organization as a corporation the company has paid taxes to the State; those paid prior to 1850 were charged to expense account, and the amount cannot be readily ascertained. Since 1850 the company has paid the State in taxes, as nearly as can be ascertained, the sum of $175,719. This amount is exclusive of tonnage tax collected for and paid over to the State.

The company paid to the United States between the years 1863 and 1871 the sum of $34,661.47 of revenue tax.

Amount paid annually for repairs, exclusive of "construction account."

Year.	Amount.	Year.	Amount.	Year.	Amount.
1846	$7,320 81	1861	$5,894 12	1875	$44,870 20
1847	2,141 49	1862	4,606 83	1876	22,873 13
1848	2,854 25	1863	4,706 38	1877	35,360 39
1849	4,259 32	1864	20,767 78	1878	25,966 68
1850	3,428 52	1865	32,348 37	1879	27,102 59
1851	4,696 92	1866	28,425 97	1880	24,438 89
1852	11,454 09	1867	69,873 47	1881	79,569 44
1853	3,629 11	1868	65,880 60	1882	34,498 56
1854	2,128 42	1869	21,042 25	1883	44,409 62
1855	1,245 53	1870	38,714 98	1884	55,683 24
1856	29,189 17	1871	32,996 55	1885	47,248 50
1857	16,271 15	1872	22,408 92	1886	27,082 28
1858	12,575 97	1873	46,958 15		
1859	21,541 17	1874	38,463 85	Total	1,032,324 40
1860	7,396 74				

Dividends declared on stock of Monongahela Navigation Company.

[From 1839 to 1853 no dividends were declared.]

Year.	Month.	Dividend.	Per cent.	No. shares.
1853	July	Cash	4	10,424
1854	January	do	4	10,424
1854	July		5	10,424
1855	January	Stock	4	10,756
1855	July	do	4	11,375
1856	January	do	4	11,909
1857	July	do	3	12,629
1858	January	do	9	12,991
1858	July	Cash	3½	14,186
1859	do	Stock	3	14,234
1860	January	do	2½	14,507
1860	July	Cash	4	14,515
1861	January	do	4	14,529
1861	July	do	1½	14,532
1862	do	do	5	14,534
1863	January	do	2	14,538
1863	July	do	4½	14,543
1864	January	do	4	14,544
1864	July	do	2½	14,544
1865	January	do	5	14,548
1865	July	do	5	14,553
1866	January	do	5	14,555
1866	July	do	6	14,561
1867	January	do	5	14,562
1867	July	do	5	14,564
1868	January	do	2	16,716
1868	July	do	4	16,731
1869	January	do	3	16,734
1869	July	do	6	16,741

Dividends declared on stock of Monongahela Navigation Company—Continued.

Year.	Month.	Dividend.	Per cent.	No. shares.
1870	January	Cash	5	16,745
1870	July	do	5	20,050
1871	January	do	4	20,070
1871	July	do	5	20,076
1872	January	do	4	20,079
1872	July	do	5	20,083
1873	January	do	3	20,083
1873	July	do	6	20,085
1874	January	do	4	20,086
1874	July	do	6	20,086
1875	January	do	4	20,086
1875	July	do	5	20,086
1876	January	do	4	20,086
1876	July	do	6	20,086
1877	January	do	6	20,086
1877	July	do	6	20,088
1878	January	do	6	20,088
1878	July	do	6	20,088
1879	January	do	6	20,090
1879	July	do	6	20,090
1880	January	do	6	20,090
1880	July	do	6	20,091
1881	January	do	6	20,093
1881	July	do	4	20,093
1882	January	do	6	20,093
1882	July	do	6	20,093
1883	January	do	6	20,093
1883	July	do	6	20,093
1884	January	do	6	20,093
1884	July	Stock	6	20,093
1885	January	do	6	21,275
1885	July	do	6	22,536
1886	January	do	6	23,893
1886	July	do	6	23,326

In order to compensate the stockholders for the application of the revenues of the company to the payment of the bonded debt, contracted for construction and interest thereon, the legislature in 1854 passed an act authorizing the company to issue stock for the amount of money so expended out of the earnings, and distribute the same to the stockholders. In pursuance of this authority they distributed in 1867 15 per cent. and in 1870 20 per cent. to the stockholders.

It is under the provisions of this act of assembly of January 25, 1854, that the company have since January, 1884, declared to its stockholders dividends in stock instead of cash, the cash having been applied to the construction of the new work.

COST OF CONSTRUCTION.

It is believed to be impossible to ascertain with any degree of certainty the exact cost of each separate construction constituting the works of the company, excepting as to the work done since 1881. One reason for this is that a good deal of construction work has at all times been done by the company's salaried employés, and the cost of material and wages have been charged to account of "construction" without separating the items. Then, again, the company, when doing the work by contract, furnishes the iron work and cement, which also are usually charged to construction account without specifying the particular work.

The following is a condensed abstract of the construction account:

Lock and Dam No. 1	$96,623 10
Lock and Dam No. 2	96,635 94
Lock and Dam No. 3	116,884 89
Lock and Dam No. 4	109,242 82
Lock and Dam No. 5	102,457 88
Lock and Dam No. 6	96,378 96
Additional Lock No. 1	56,800 00
Additional Lock No. 2	45,186 02
Iron and lime in Locks 1–4	22,110 62
Raising height of Dam No. 2	7,705 00
Raising height of Dam No. 4	7,200 00
Raising height of Lock No. 1	4,976 13

Constructing Crib No. 1		$6,000 00
Constructing anchor crib		3,600 00
Constructing crib at Lock No. 2		6,850 00
Constructing crib below Lock No. 1		1,951 50
Damages to lands, &c., prior to 1863		15,150 10
Dredging to deepen river channel		9,798 50
Construction to replace work destroyed by ice and floods, &c		67,036 76
Engineering prior to 1870	$15,439 40	
Engineering since 1881	15,804 73	
		31,244 13
Repair-boat No. 1	5,818 14	
Repair-boat No. 2	19,036 70	
		24,854 84
Lock houses and lots and houses for hands		23,962 78
Items of construction not charged to separate items of work		114,046 73
Interest on bonds, &c., given for construction		326,471 21
Pumping-machinery for pump and locks $\frac{3}{8}$ of cost		1,000 00
Chute in Dam No. 1		26,115 74
Lock and Dam No. 7		161,733 13
Additional lock at Dam No. 3		220,214 43
Additional lock at Dam No. 4		199,575 73
Total		2,001,206 94

The total amount of construction account above given is larger than the amount given in my previous statement, chiefly by reason of the addition of the following items:

Coupons paid on construction bonds from July, 1870, to December, 1886	$134,945 00

Also the following items of construction, omitted in making out former statement:

Building crib at Lock No. 2	$6,850 00
Raising Dam No. 4	7,200 00
Dredging river channel	1,950 00
Pumping machinery	1,000 00
Paid on new construction in 1872	13,586 69
Paid on new construction in 1873	5,865 31
Paid on new construction in 1880	3,627 93
	175,024 93

The above statement of cost of construction, aggregating the sum of $2,001,206.94, represents accurately (as I believe, after as careful an examination as it was possible to make in the time) the cost of the construction of the works of the company, and does not include any part of the amount of $1,032,324.40, paid from time to time for repairs, as appears in a former part of this paper. Much of the work charged to repair account was in fact reconstruction, and might perhaps have been more properly charged to construction account.

DATES OF CONSTRUCTION.

Locks and Dams Nos. 1 and 2 were completed in the fall of the year 1841. Locks and Dams Nos. 3 and 4 completed fall of 1844. Additional Lock No. 1, built in 1847; additional lock No. 2, built in 1854. Locks and Dams Nos. 5 and 6 completed in fall of 1856. Lock and Dam No. 7 completed in fall of 1884. Additional Lock No. 3 completed in fall of 1884; additional lock No. 4 completed in fall of 1886.

PRESENT VALUE OF WORKS OF THE COMPANY.

You suggest that any opinion or estimate of the intrinsic value of the works of the company will be gladly received. I will, therefore, close this statement with a few remarks on this subject.

There is no question, I think, that the works of the company, consisting chiefly of seven crib dams filled with stone, and eleven cut-stone locks, are in good condition, and are equipped with suitable machinery and appliances for the opening and closing of the gates, and the rapid passage of boats, &c.

There is a large amount of work in the shape of crib piers, &c., very necessary for the successful navigation of the river, not represented at all by the cost of construction of the seven dams and eleven locks, before referred to; and a large amount of work has been done by deepening the channel by dredging, removing snags, &c.

The original or first cost of these structures is no true test of their present value. Such work well cared for, as that of this company has been, does not deteriorate, but rather grows better by age. Besides, to put it in place now would cost much more money than it did cost when originally constructed. Of course I refer chiefly to the work constructed prior to 1881.

Taking the seven dams and eleven locks alone, a very fair estimate of their present value, apart from their earning capacity, may be had by taking the cost of the recently constructed work as a guide.

The new Lock and Dam No. 7 may be taken as representing in size and amount of work the original locks and dams, excepting that Dam No. 7 is shorter than the others, and in size, &c., the extra Lock No. 4 may be taken as a type of the four additional locks. This average estimate will not be far out of the way, although manifestly an underestimate of the money value of the seven locks, for the reason that Lock No. 7 has a rock foundation, thus saving the cost of a bottom of timber, concrete, and plank, necessary where (as is the case I think with all the other locks) the foundation is gravel.

The estimate above suggested (the cost of Lock and Dam No. 7 being $161,733.13) would result thus:

Seven locks and dams, at $162,000	$1,134,000
Additional Lock No. 3, at cost, say	220,000
Three additional locks at cost of No. 4, viz, $196,000 each	588,000
Total	1,942,000

It will be noticed that this estimate is merely an approximation, and that it does not include cost of engineering, nor cribs, piers, lock houses and lots, and houses for hands, repair-boats, pumping machinery, &c., all of which should be taken into account, so that I do not suppose that the existing works and property of the company (exclusive of franchises) could be replaced for a sum less than from $2,250,000 to $2,500,000.

But the value to the company of the property which it is proposed that the United States Government should purchase cannot be estimated merely at the amount in money necessary to construct the same work at the present time. Such estimate takes no account of the franchises of the company as a corporation, including the right to collect a reasonable toll from those who use the improvement. Without this improvement the Monongahela River would be practically unnavigable, and the existing coal trade, from which our revenue is chiefly drawn, owes its very existence to the slack-water improvement of the Monongahela Navigation Company.

In arriving at the value of the improvement to the company the earning capacity of the works must, I submit, enter into the calculation, and such value cannot be less than the amount of capital which can be safely invested to yield a similar return.

Very respectfully,

W. BAKEWELL,
Treasurer Monogahela Navigation Company.

Maj. W. R. KING,
Maj. A. STICKNEY,
Maj. A. MACKENZIE,
Board of U. S. Engineers, &c.

OFFICE OF MONONGAHELA NAVIGATION COMPANY,
Pittsburgh, Pa., January 14, 1887.

DEAR SIR: At the request of Major Mackenzie, per his letter to me of 11th instant, I send you the following statement as of December 31, 1886. He asks me to state "the excess of liabilities over assets on December 23, 1886, or thereabouts."

LIABILITIES.

First-mortgage bonds (6 per cent., due July 1, 1887)	$32,000	00
Second-mortgage bonds, 5 per cent	296,000	00
State treasurer (for taxes due January, 1887)	8,081	46
Dividends unpaid	18	00
Coupons unpaid prior to January 1, 1887	1,265	00
Coupons due January 1, 1887	8,360	00
Suspended account	6,477	76
	352 202	22

ASSETS.

Cash	$36,112 77
Uncollected toll bills	26,052 03
Bonds (Pittsburgh and Allegheny) cost	11,455 00
Bills receivable	1,500 00
	75,119 80

Allow me, also, as bearing on the question of the commercial importance of the Monongahela River improvement, to present the following statement of the relative amount of tolls from each lock during the year 1886.

Lock No. 1	$52,554 48
Lock No. 2	97,544 43
Lock No. 3	39,797 18
Lock No. 4	59,805 92
Lock No. 5	1,265 24
Lock No. 6	1,832 22
Lock No. 7	2,542 36
	255.341 83

A large portion of the tolls at No. 7 are paid by the packet boats which run from Geneva to Pittsburgh and back.

Yours truly,

W. BAKEWELL,
Treasurer Monongahela Navigation Company.

Maj. W. R. KING,
U. S. Engineer Corps, Willets Point, N. Y.

APPENDIX 6.

RESOLUTION OF LOUISVILLE BOARD OF TRADE.

LOUISVILLE BOARD OF TRADE,
Louisville, Ky., November 18, 1886.

Copy of resolution adopted by board of directors in March, 1886.

Resolved, That our Representatives and Senators are earnestly requested to use every endeavor in their power to make the navigation of the Monongahela River free, as under the present state of affairs it is a heavy tax and burden upon the commerce of the Mississippi Valley.

From the minutes.

H. A. DUDLEY,
Secretary.

APPENDIX 7.

OPINION OF THE ATTORNEYS FOR MONONGAHELA NAVIGATION COMPANY RESPECTING QUESTIONS INVOLVED.

Mr. M. K. MOORHEAD,
President of the Monongahela Navigation Company:

In pursuance of the act of Congress approved the 5th day of August, 1886, a board of United States Engineers has been appointed to report on the commercial importance and value of the works and property of the Monongahela Navigation Company. At the recent session of the said board, held in Pittsburgh, for the purpose of procuring information on which to base a report, a question arose whether, in assessing a value upon the company's works and property, an allowance should be made for the franchise or power to collect tolls, or whether the board was restricted to a simple valuation of the company's structures, consisting chiefly of locks and dams.

At your request we have considered this question, and here by furnish you with a brief statement of our conclusion and on the reasons on which it is based.

The purpose or end to be accomplished by a statute or other written instrument, should be considered in the construction of its terms, and it is an obvious canon or rule of interpretation that the language of the statute should be read so as to promote the intention of the law-maker. It is plain in the present instance that the object or purpose had in view by Congress in creating this Commission was to secure such a disinterested report on the value of the Navigation Company's works and property as would enable Congress to decide whether the public welfare would be promoted by the action of the General Government in condeming the Navigation Company's works, subjecting them to the control of the Government, and thus relieving those who avail themselves of the advantages afforded by these improvements from the burden of paying tolls; and, if so, to enable Congress to make provision for the expense of such condemnation.

We may further fairly assume that it was the intention of Congress, in directing an inquiry into the value of the company's works and property, to ascertain what would be a just and full compensation to the company and its stockholders, if they are to be deprived of their property for the use of the public.

With the assistance of these general principles, we come now to a consideration of the language employed, "value of the company's works and property," and the first observation we offer is, that Congress did not restrict the inquiry to the value of the company's *works*, much less to the *cost* of such works, but includes the value of the company's property. The word "property," is a word of general import, including everything which is the subject of ownership, and obviously of much wider signification than the word "works."

Read in the light of the purpose of the legislation and of the assumption that Congress designs to act justly, it is obvious that what is sought by this language is such a finding of the value of the company's property as to furnish a measure of compensation, should it be determined to appropriate it to public use. It is equally obvious that no method or scheme of valuation would furnish a just measure of compensation which did not regard the profits or dividends which the property earns and confers upon its owners. If a person were contemplating a purchase of these works, the first and most important question he would ask would be, "What *income* can I expect to derive from them?" There is no mystery or occult quality inhering in a purchase or condemnation of these works by the Government. It only means a substitution for the ownership and enjoyment of these works and tolls of such a sum of money as will fully compensate the company and its stockholders. If *nothing* be given for the property, then it is an act of *confiscation*. If less be given than will make its owners whole, then it is *partial* confiscation.

An apt illustration of these views is found in a recent case decided by the supreme court of Pennsylvania—the County of Montgomery *vs.* The Schuylkill Bridge Company, reported in Pittsburgh Legal Journal, vol. 16, page 171—and wherein that court declared: "The measure of damages when a toll-bridge is taken by a county for public use is not merely the cost of a new structure, less the loss that has been caused by wear and decay. *The right to take toll* is as proper a subject of compensation as the material property of the company, and should be as thoroughly considered. The value of such a franchise depends upon its productiveness, and that not in past years, at a time when the population of the surrounding districts was much less, but at the time of the taking. Nor is it material to inquire what is the value to the county taking the bridge. The question is what loss the company has sustained."

The doctrine of this case is so obviously sound that we do not deem it necessary to protract this opinion by citing the numerous decisions of other courts to the same effect. We may, however, briefly refer to the opinion of the supreme court of Pennsylvania in the case of the Commonwealth against the Pittsburgh and Connellsville Railroad Company (8 P. F. S., 50). That was an attempt, by means of an act of assembly of the State of Pennsylvania, under the exercise of a power reserved to the State in the charter of the Pittsburgh and Connellsville Railroad Company, to take the company's works, subject to the duty of compensation, and that learned court held the act in question unconstitutional and void, because it provided for a payment to the company not of the *value*, but of the *cost* of its road, thus overlooking the value conferred upon the road by the company's right to collect tolls. In the case of the Commonwealth *vs.* the Pittsburgh and Connellsville Railroad Company (8 P. F. S., 50) it was held that a franchise is *property*, has value as such, and is within the protection of that clause of the Constitution that declares that private property shall not be taken for public use without just compensation being made.

It was contended, in the oral argument before the board, by the learned counsel who appeared on behalf of certain persons who have an individual interest, as shippers of coal, in the removal of tolls, that a distinction could be made between the foregoing and cognate cases and the case in hand by a consideration of the fact that the improvements and works in question had been built, under authority of the State of Pennsylvania, upon a navigable stream, over which the United States Government could exercise its control whenever it thought fit.

We are unable to see any force in this suggestion. In the first place, it proves too much. For, if well founded, it would follow that there is no right of compensation at all for works as well as franchises. If a knowledge on the part of the corporators that the United States Government might constitutionally extend and exercise its jurisdiction over the Monongahela River could be deemed an answer to their claim for indemnity in respect to the toll-paying capacity of the works, it would equally be an answer to a claim to be reimbursed for their outlay in constructing the locks and dams.

But, as we have seen, Congress has not proposed to act in such a barbarous and unjust manner, but has, as decency requires, raised a commission to report the value of the works and property of this company, so that proper compensation may be made if at last Congress decides to take these improvements for public use.

If, then, it is within the power and duty of the board, as prescribed by the act of Congress, to consider the right to take toll as a proper subject of compensation, another question arises, How can such right to take toll be valued, or by what means can the board be enabled to estimate its value?

An answer to this question is furnished by the case already cited: "The property and franchise of the bridge company are represented by its stock, and the market value of the stock may be said to represent the market value of this property taken as nearly as can be ascertained." Of course there may be cases in which the market value of the stock would afford a very insufficient measure of the value of the company's plant. But, in the present case it at least presents a convenient mode of estimating the value of the company's right to take tolls. It is only another method of enabling the board to find the value of the company's works and property by regarding the annual income derived from them.

In this discussion, we have conceded what, in other circumstances, might well be denied, viz, the power of Congress to appropriate these works, built, as they were, under State authority upon a stream never navigable, except only when swollen by freshets and then merely with the current, and thus not an avenue of commerce between the States, in the legal and constitutional meaning of that term.

This question, of course, is not before this board for consideration, nor the assumption that Congress could take possession of and confiscate these works without compensation.

And, upon the whole, we conclude that it was the intention of Congress, as already shown by the language of the act, that the board should report the value of the property of the company, in its entirety, so far as it is a subject of ownership and valuation; that the franchises are a principal part of such property; and that a just measure of valuing the same will be found in the market value of the stock.

GEORGE SHIRAS, Jr.,
R. B. CARNAHAN,
Attorneys for the Monongahela Navigation Company.

APPENDIX 8.

COPIES OF ACTS OF PENNSYLVANIA LEGISLATURE AFFECTING THE MONONGAHELA NAVIGATION COMPANY.

[Furnished by the Monongahela Navigation Company.]

AN ACT to repeal the State tax on real and personal property, and to continue and extend the improvements of the State by railroads and canals, and to charter a State bank to be called the United States Bank.

Be it enacted by the senate and house of representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by authority of the same,

* * * * * * *

SEC. VI. And the said corporation shall further be bound to subscribe the following sums to the capital stock of the following-named companies, if requested to do so by the Directors of the said companies or either of them, within one year from the passage of this act, namely:

* * * * * * *

To the Monongahela Navigation Company fifty thousand dollars, if the same be incorporated at the opening of the books of subscription for the capital stock thereof, and the further sum of fifty thousand dollars as soon as one hundred thousand dollars subscribed by other persons or bodies corporate shall have been *bona fide* expended on the construction of the said work.

(Approved February 18, 1836. Pamphlet Laws, page 43. The United States Bank.)

AN ACT to authorize the Governor to incorporate a company to make a lock navigation on the River Monongahela.

SECTION 1. *Be it enacted by the senate and house of representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by authority of the same,* That Thos. H. Baird, Aaron Kerr, Ephraim L. Blain, William Briant, Shasbazzer Bentley, Andrew Gregg, John Bowers, Wm. Vankirk, Samuel Beatty, William Hopkins, and James Gordon, of Washington County; George Dawson, Benedict Kimber, Geo. Hogg, James L. Bowman, Israel Miller, David Gilmore, E. R. Oliphant, Jeremiah Davison, Thos. Wilson, Tazwell P. Martin, Geo. Cramer, Yates S. Conwell, Thomas Beatty, Aaron Bucher, John Harshe, Andrew Stewart, Samuel Evans, Isaac Crow, George Vance, James C. Etington, Robert Brown, James C. Ramsey, David B. Rhoads, William Everhart, Wesley Frast, and Samuel J. Krepps, of Fayette County; Isaac Hill, Alexander Davidson, Thomas Hughes, Lawrence L. Miner, Robt. Maple, Daniel Boughner, Thomas Horner, sen., Benjamin F. Black, Joseph Bailey, Ralph Drake, Samuel McGuire, Aaron Gregg, Joseph Reinhart, John Lindsay, William Litzamberg, Jonathan Gerard, and James Maple, of Greene County; Joseph Taylor, Thomas Raynolds, James McClure, Gilbert Stevens, Samuel Church, James W. Burbridge, Fauntly Muse, Samuel Walker, Christopher Magee, Neville B. Craig, James Ross, jr., Samuel Stackhouse, Thomas Bakewell, James Anderson, John Irwin, Charles S. Bradford, William A. Penniman, Henry Smyser, William Larimer, Valentine Fehle, George Bell, Robert H. Peebles, Thomas M. Giffin, are hereby appointed commissioners to do and perform the several things hereinafter mentioned, that is to say, they or any five of them shall, on or before the first Monday of May next, procure a sufficient number of books, one or more of which shall be opened at convenient places in the city of Pittsburgh, at Elizabethtown and McKeesport in Allegheny County, at Williamsport and Fredericktown in the county of Washington, at Cookstown, Brownsville, and Geneva in the county of Fayette, and at Greensburg and Jefferson in the county of Greene, and in each of them enter as follows: "We, whose names are hereunto subscribed, do promise to pay to the president and managers of the Monongahela Navigation Company the sum of fifty dollars for every share of stock set opposite to our names respectively, in such manner and in such proportions and at such times as shall be determined by the president and managers of said company, in pursuance of an act of the general assembly of this Commonwealth, entitled 'An act to authorize the Governor to incorporate a company to make a lock navigation on the river Monongahela.' Witness our hands this —— day ——, in the year of our Lord, 18—"; and shall thereupon give notice in one or more newspapers printed in the county of Fayette, in one or more newspapers printed in the borough of Washington, one or more newspapers printed in Greene County, and one or more newspapers printed in the city of Pittsburgh, for one calendar month at least, of the times and places when and where the said books shall be kept open to receive subscriptions for the stock of the said company, at which times and places at least two of the Commissioners shall attend, and permit all persons of lawful age, who shall offer to subscribe in the said books in their own name, or in the name of any other person who shall authorize the same, to subscribe for any number of shares in the said stock, and the said books shall be kept open respectively for the purpose aforesaid, at least six hours in every juridical day for the space of ten days, at the following-named places, to wit: The city of Pittsburgh, Elizabethtown in the county of Allegheny, at Williamsport in the county of Washington, at Brownsville, Cookstown, and Geneva in the county of Fayette, and at Greensburg and Jefferson in the county of Greene; and if at the expiration of ten days it shall be ascertained that there is not six thousand shares subscribed in the books aforesaid, the said Commissioners may adjourn from time to time and transfer the books elsewhere until the whole number of six thousand shares aforesaid shall have been subscribed; of which adjournment and transfer of the books the Commissioners aforesaid shall give public notice, as the occasion may require, and when the whole number of shares shall be subscribed, then the books shall be closed: *Provided always,* That every person offering to subscribe in the said books, in his own or any other name, shall previously pay to the attending Commissioners the sum of five dollars for every share subscribed, out of which shall be defrayed the expenses attending the taking of such subscriptions and other incidental expenses, and the remainder shall be paid to the Treasurer of the corporation, as soon as the same shall be organized and the officers chosen, as hereinafter mentioned.

SEC. 2. That when two thousad shares or more of the said capital stock shall be subscribed the Commissioners, or a majority of them, shall certify to the Governor, under their hands and seals, the names of the subscribers and the number of shares subscribed by each, whereupon the Governor shall, by letters patent, under his hand and the seal of the Commonwealth, create and erect the subscribers, and if the subscription be not full at the time, then all those who shall thereafter subscribe to the number of shares, as aforesaid, into one body politic and corporate, in deed and in law, by the name, style, and title of the "The President, Managers, and Company of

the Monongahela Navigation Company," and by the same name the subscribers shall have perpetual succession, and all the privileges and franchises incident to a corporation, and shall be capable of taking and holding their capital stock, and the increase and profits thereof, and of enlarging the same from time to time by new subscriptions, in such manner and form as they shall think proper, if such enlargement shall be found necessary to fulfill the intention of this act, of purchasing, taking, and holding, to them, their successors, and assigns, in fee simple, or for any less estate, all such lands, tenements, hereditaments, and estate, real and personal, as shall be necessary to them in the prosecution of their works; of suing and being sued, and of doing all and every other matter and thing which a corporation or body politic may lawfully do.

SEC. 3. Samuel Walker, George Dawson, George Hogg, James L. Bowman, Israel Miller, Aaron Kerr, Neville B. Craig, Samuel Stackhouse, James Ross, jr., and William W. Irwin, or a majority of them, shall, as soon as conveniently may be after the said letters patent shall be obtained, give at least twenty days' notice, in all the public newspapers hereinbefore mentioned, of the time and place by them appointed for the subscribers to meet, in order to organize the said company, who shall choose, by a majority of votes by ballot, to be given in person or proxy duly authorized, one president and ten managers, a treasurer, secretary, and such other officers as shall be deemed necessary, which proxy shall have been obtained and bear date within three months previously to the election at which such proxy shall be presented; and the president and managers chosen as aforesaid shall conduct the business of said company until the first Monday in January next, and until like officers shall be chosen, and may make such by-laws, rules, orders, and regulations as do not contravene the Constitution and laws of the United States or of this State, that may be necessary for the well-governing the affairs of the company; and the said company may demand and take such securities from their officers and agents, and in such sums as may be fixed by the by-laws or by resolution of the Board, for the faithful discharge of their respective duties.

SEC. 4. The stockholders shall meet on the first Monday of January in every year, at such place as may be fixed upon by the by-laws, of which notice shall be given, at least twenty days by the secretary in the newspapers before mentioned, and choose, by a majority of the votes present, such officers (for the ensuing year) as mentioned in the third section of this act, who shall continue in office one year and until others are chosen, and at such other times as they may be summoned by the managers, in such manner and form as shall be prescribed by the by-laws, at which annual and special meeting they shall have full power and authority to make, alter, or repeat such by-laws, by a majority of votes, in manner aforesaid, and to do and perform and other corporate act; and every person holding ten or any less number of shares or said stock shall be entitled to one vote for every share so held at any election for officers for said company or other meeting of stockholders, and one vote for every additional ten shares: *Provided*, That no number of shares shall entitle the holder thereof to more than ten votes: *And provided*, That the omission of the stockholders to meet and elect as aforesaid shall work no forfeiture, but they may be afterwards called together for that purpose by the managers.

SEC. 5. The said President and Managers shall meet at such times and places as shall be found most convenient for the transacting of their business, and when met, five shall be a quorum, who in the absence of the president may choose a chairman, and shall keep minutes of their transactions to be fairly entered in a book, and a quorum being formed, they shall have full power and authority to appoint all such surveyors, engineers, superintendents, and other artists and officers, as they shall deem necessary to carry on the intended work, to fix their salaries and wages, to ascertain the times, manner, and proportions in which the said stockholders shall pay the moneys due on their respective shares, to draw orders on the treasurer: *Provided*, That such drafts or orders be signed by the President, or in his absence by a majority of the quorum present, and generally to do all such other acts, matters, and things as by this act, and the by-laws and regulations of the company, they shall be authorized to do.

SEC. 6. The President and Managers first chosen shall procure certificates or evidence of stock for all the shares of the said company respectively, and shall deliver one such certificate, signed by the President and countersigned by the Treasurer and sealed with the common seal of the corporation, to each person, for every share by him, her, or them subscribed and held, he, she, or they paying five dollars for each share, as aforesaid, which certificates or evidence of stock shall be transferable at pleasure in person or by attorney, duly authorized, in the presence of the President or Treasurer, to be entered in a book to be kept for that purpose, subject, however, to all payments due or to become due thereon; and the assignee holding any certificate entered as aforesaid shall be a member of the said corporation, and entitled to one share of the capital stock, and of all the estates and emoluments of the company incident to one share, and to vote as aforesaid at the meetings thereof, and be subject to all the

penalties and forfeitures, and of being sued for all the balance and penalty due or to become due on each share, as the original subscribers would have been.

SEC. 7. After thirty days' notice in the public papers aforesaid of the time and place appointed for the payment of any proportion or installment of the said capital stock, in order to carry on the work, any stockholder having neglected or refused to pay such proportion or installment at the place appointed for the space of thirty days after the time so appointed, every such stockholder, or his assignee, shall, in addition to such installment so called for, pay at the rate of two per centum per month for the delay of such payment, and if the same and additional penalties shall remain unpaid for such space of time as the accumulated penalty shall become equal to the sums before paid in part and on account of such shares, the same shall be forfeited to the said company, and may be sold to any person or persons willing to purchase, for such price as can be obtained for the same; or in default of payment by any stockholder of any such installment as aforesaid, the said President and Managers may, at their election, cause suit to be brought, before a justice of the peace, or in any court having competent jurisdiction, for the recovery of the same, together with the penalties aforesaid: *Provided*, That no stockholders, whether original subscriber or assignee, shall be entitled to a vote at any election, or at any general or special meeting, of said company, on whose share or shares any installment or arrearages may be due and payable more than thirty days previously to said election or meeting.

SEC. 8. It shall and may be lawful for the said President, Managers, and company, their superintendents, surveyors, engineers, artists, and workmen, to enter upon the said river Monongahela, and upon the lands on either side, and to use the rocks, stones, gravel, or earth which may be found thereon, in the construction of their works, first giving notice to the owner or occupiers of the land, and to form and make, erect and set up any dams, locks, or any other device whatsoever, which they shall think most fit and convenient to make a complete slackwater navigation between the points herein mentioned, to wit:—the city of Pittsburgh and the Virginia State line; and that the dams which they shall so construct for the purpose of slackwater navigation shall not exceed in height four feet six inches, and that the locks for the purposes of passing steamboats, barges, and other crafts, up as well as down said river, shall be of sufficient width and length to admit a safe and easy passage for steamboats, barges, and other crafts, up as well as down said river; they shall make amends for any damage that may be done on said lands, and pay the owner or owners for the materials taken away, as well as for the land occupied in the construction of the said dams and water works: *Provided*, If the parties cannot agree, the said damages are to be valued by five disinterested freeholders, appointed by the consent of the parties, or if they cannot agree, by any disinterested Justice of the Peace of the proper county, and the report made by the freeholders so agreed upon, or appointed as aforesaid, or a majority thereof, shall be filed in the office of the prothonotary of the county in which the land lies, and shall be regularly entered of record, which report being confirmed by the court, judgment shall be entered thereon, and execution may issue in case of non-payment for the sum awarded, with reasonable costs to be assessed by the court; and it shall be the duty of the five freeholders aforesaid, in assessing the damages, to take into consideration the advantages derived to the owner or owners of the premises from the said improvements hereby authorized: *Provided*, That either party may appeal to the court within thirty days after such report may have been filed in the prothonotary's office of the proper county, in the same manner as appeals are allowed in cases under the act entitled "An act regulating arbitrations," passed the twentieth day of March, Anno Domini eighteen hundred and ten: *Provided further*, That before entering upon or occupying any lands, said company shall give security, to be approved by the Court of Common Pleas of the county in which the land lies, to pay the amount of damages, which shall be finally adjudged against them for such occupation or entry upon such land.

SEC. 9. The said President, Managers, and company shall have the privilege, and be entitled to use the water-power from the said river, to propel such machinery as they may think proper to erect on the land which they may previously have purchased from the owner or owners, or may sell in fee, lease or rent, for one or more years, the said water-power, to any person or persons, on such terms as shall be most advantageous to the corporation: *Provided*, It may be so done that it shall not injure, impede, or interrupt the navigation, and that the moneys arising from such sale of the water-power be applied to the use and benefit of said corporation.

SEC. 10. So soon as twenty miles of the slackwater navigation shall be completed, the said President and Managers shall give notice thereof to the Governor, who shall thereupon nominate and appoint three disinterested persons to view and examine the same, and report to him in writing, under oath or affirmation, whether the said works have been so far executed in a workmanlike manner, according to the true intent and meaning of this act; and if at any time their report shall be in the affirmative, then the Governor shall, by license, under his hand and the seal of this commonwealth, permit the said President, Managers, and company, or such person as they shall from time to time

appoint, to collect the tolls; which shall not exceed the following rates, to wit: That the President and Managers shall be entitled to take and receive the same rate of toll per ton, or otherwise, at their discretion, as the Schuylkill Navigation Company are entitled to receive under their act of incorporation: *Provided further*, That if at the expiration of two years after the said work shall have been completed, the tolls, together with the interest of the surplus of any money arising from the sales of water-power, or the rents and profits thereof, should enable the company, after paying all repairs and other necessary expenses, to divide more than seven per centum per annum on the capital stock expended, the tolls shall be so reduced that the dividends shall not exceed seven per cent., and shall so continue for five years, and if at the expiration of that time they shall exceed nine per cent., they shall be so reduced as not to exceed nine per cent. and shall thereafter be so regulated, from time to time, so as not to exceed nine per cent. per annum; and if at any time after the expiration of one year from the completion of the said work, the net profits aforesaid shall not amount to seven per cent. upon the money expended, it shall be lawful to increase the said tolls so as to divide seven per cent: *Provided also*, That if it should be found at any time after the said company goes into operation, that the profits arising from the sale, rent, or lease of the said water-power should amount to seven per centum per annum on the capital stock actually expended, then it shall not be lawful to demand or receive any toll at any of the locks aforesaid, but to permit all persons going up or down said river in boats, barges, or other vessels, to pass through said locks free of any toll, or other charges whatsoever.

SEC. 11. It shall be the duty of the commandant of any boat, barge, or other vessel navigating the said river, when he shall arrive within one-fourth of a mile from any lock so erected, under the penalty of two dollars, to blow a horn or trumpet or ring a bell, whereupon the keepers of such lock shall attend for the purpose of opening such gate or sluice to let the said boat, barge, or other vessel pass without unnecessary delay, and in safety; and if any boat, barge, or other craft shall be prevented from passing up or down any of the said locks or sluices by reason of the lock not being raised for more than thirty minutes, the President, Managers, and company shall, upon conviction thereof, forfeit and pay to the persons so hindered the sum of one dollar for every thirty minutes beyond the said time that he shall be so prevented, and in the same proportion for any longer or shorter time, and civil process in the proper county, and next to the place where the offense shall have been committed, shall be served by the owner or owners thus aggrieved upon the aforesaid President, Manager, and company.

SEC. 12. If the President, Managers, and company shall neglect or refuse to keep in good order and repair any dam, lock, or sluice of their own construction, or shall neglect to remove any obstacle which may occur therein, so that boats, barges, rafts, or vessels cannot at all times safely navigate said river when the same is not prevented by ice or other unavoidable cause, they shall for every such offense pay the sum of fifty dollars, to be recovered in the same manner as debts of equal amount are, or shall be by law recoverable, one-half to the use of the informer and the other half to the use of the poor of the township or county where the neglect or refusal may occur.

SEC. 13. If any person or persons shall wilfully and knowingly do any act or thing whereby the navigation shall be impeded, or any dam, lock, gate, or engine, machine, or device therein belonging, or any machinery or property of the company shall be injured or damaged, he, she, or they so offending shall forfeit and pay to the said company double the damages by them sustained, together with costs, to be recovered by action of debt before any Justice of the Peace, or in any court of competent jurisdiction.

SEC. 14. The President and Managers of the said company shall keep fair and just accounts of all moneys received by them from the said Commissioners, and from the subscribers to the undertaking, on account of the several subscriptions, of all penalties for delay in the payment thereof, and the amount of profits on the shares which may be forfeited as aforesaid, and also of all the moneys by them expended in the prosecution of said works, and shall in every year submit such accounts to the stockholders, at their annual meetings, and when the aggregate amount of such receipts and expenditures shall be ascertained, and upon such liquidation, or when the capital stock shall be nearly expended, it shall be found that the said capital stock will be insufficient to complete the said navigation, according to the true intent and meaning of this act, it shall and may be lawful for the said President, Managers and company, at a stated or special meeting, to be convened for the purpose, to increase the number of shares to such extent as shall be deemed sufficient to accomplish the work, and to receive and demand the moneys for shares so subscribed, in like manner and under like penalties as are hereinbefore provided, or as shall be provided by their by-laws.

SEC. 15. The President, Managers, and company shall keep a just and true account of all the moneys received by their several and respective collectors of tolls, at the several and respective locks, and all moneys received for the rent or hire of the water-

power, and all other emoluments, and shall make and declare a dividend of the clear profits and income thereof, among all the stockholders, in proportion to the stock held by each, all contingent costs and charges being first deducted, and shall, on the first Monday of January in each and every year, publish the dividend made of their clear profits, and the time when and the place where the same shall be paid to the stockholders, not exceeding twenty days thereafter, and shall cause the same to be paid accordingly, and shall, on or before the first Monday of February, in every year after the incorporation of the company, lay an abstract of the accounts of their receipts and disbursements before the legislature, under oath or affirmation of the President of the company; and the said company shall pay annually into the treasury of the commonwealth a tax of eight per centum per annum on all dividends which may exceed six per centum on the capital stock actually paid in.

SEC. 16. Nothing herein contained shall at any time injure, destroy, or in any way impair any right, privilege or legal claim which may have been granted to individuals by any act or acts of assembly heretofore passed, for the purpose of erecting mill-dams on said river, but such persons as have mill-dams thereon are hereby enjoined to have them constructed or raised to the same height as is prescribed in the eighth section of this act, at their own proper cost and expense, and also to build and erect a suitable lock or locks, and guard-wall, and the same to be inspected and approved of by the said President and Managers, or a majority of them, and to maintain and keep the same in perfect order and repair, to receive tho tolls, and be subjected to the same penalties and forfeitures, and be liable to have process served on him, her, or them, in the same manner as the President, Managers, and company are subject to according to the provisions of this act; but if the owner of such privilege shall, for six weeks after notice given by said President, Managers, and company, neglect or refuse to construct or repair his or her dam, and make his or her lock in the manner prescribed by the company, then the said managers and company shall have power to erect such dam and lock, and receive the tolls in the same manner as is provided in the tenth section of this act.

SEC. 17. If the said President, Managers, and company shall not proceed to carry on the said work within five years from the passage of this act, and shall not complete the navigation to the Virginia State line aforesaid in seven years thereafter, according to the true intent and meaning hereof, then, and in either of those cases, all the rights, privileges, liberties, and franchises hereby granted to said company shall revert to the Commonwealth: *And provided*, That in case of forfeiture by the company the owner or owners of any water power created by any dam erected by virtue of this act shall be obliged to keep in perfect repair and good condition any dam or dams, lock or locks, connected with such water power, under and subject to the same penalties as the company originally were, and shall have the right to charge and receive the same tolls as the said company had received; and in case the owner or owners of such water power shall neglect or refuse to keep the said dam or dams, lock or locks, as aforesaid, in good order and repair, fit for the passage of boats, barges, and other vessels, as the case may be, the legislature may resume all and singular the rights, privileges, liberties, and franchises granted by this act.

SEC. 18. It shall be lawful for the Commonwealth, at the end of twenty-five years from the completion of the work hereby authorized, to purchase the improvements made in pursuance of this act, by paying to the company the original cost expended in the improvements and the subsequent expenses, together with six per cent. interest thereon, deducting from the sum of principal and interest aforesaid the dividend before declared by the said company on the capital stock, and on the payment thereof by the Commonwealth to the said company, in such manner and form as shall be agreed upon by the said company and by agents duly authorized by the Commonwealth, all and singular the improvements aforesaid, with its appurtenances, water-rights, and privileges, shall be vested in the Commonwealth, and the privileges and corprate, rights hereby granted will thereupon cease and determine, excepting so far as the same may be necessary in the settlement of the concerns of said company.

SEC. 19. No suit or action shall be brought or prosecuted by any person or persons for penalties incurred under this act, unless said suit or action shall be commenced within six months next after the offense shall have been committed or the cause of action have accrued, and the defendant or defendants in such suit or action may plead the general issue, and give this act and special matter in evidence, and that the same was done in pursuance and by authority of this act.

SEC. 20. The said company shall not engage, directly or indirectly, in any banking, moneyed, commercial, or manufacturing concern, or in the transportation or storage of any merchandise, lumber, coal, grain, flour, or other articles; nor shall they hold, erect, or own any other lands, buildings, wharves, or docks than such as are necessary and convenient for their business as a navigation company.

SEC. 21. That the said company hereby incorporated be, and they are hereby, authorized and empowered to procure the right from the proper authorities of the State of Virginia to extend the said improvements from the Pennsylvania State line as far

up the said river as the said company may deem practicable: *Provided*, That the charter or grant which shall be obtained from the said State of Virginia, for the purpose aforesaid, shall stipulate that no higher or other tolls or charges shall be made or exacted on so much of the said improvements as shall be located within the said State than are permitted to be charged by the provisions of this act on that portion of said improvements which shall be located in the State of Pennsylvania, and in default of such stipulation within three years from the passage of this act the legislature of this Commonwealth reserves the right to make such alterations and additions to the charter hereby authorized as may be deemed just and expedient.

(Approved March 31, 1836. Pamphlet Laws, page 262.)

RESOLUTION relating to the procuring and opening of books for receiving subscriptions to the stock of the company for making lock navigation on the Monongahela River.

Whereas in and by an act of the general assembly of the Commonwealth of Pennsylvania, entitled "An act to authorize the Governor to incorporate a company to make a [lock] navigation on the river Monongahela," approved the thirty-first day of March, eighteen hundred and thiry-six, it is made the duty of the Commissioners therein named to procure and prepare books for receiving subscriptions of stock of said company on or before the first Monday of May, eighteen hundred and thirty-six.

And whereas the period of time between the passage of said act and the said first Monday of May was not sufficient to enable the said Commissioners to perform the duty so enjoined upon them: Therefore,

Resolved by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, That the said Commissioners be, and they are hereby, authorized to receive subscriptions to the stock of said company, in books which may have been opened at any time, in conformity with the directions contained in the said act; and all such subscriptions of stock shall be as valid in all respects as if the said books had been procured and prepared on or before the said first Monday in May.

(Approved June 14, 1836. Pamphlet Laws, page 848.)

AN ACT to provide for repairs and to continue the improvements of the State, and other purposes.

Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania, and it is hereby enacted by the authority of the same, That the following sums are hereby specifically appropriated for the purposes hereinafter mentioned, to wit: To the stock of the Monongahela Navigation Company, twenty-five thousand dollars.

(Approved April 14, 1838. Pamphlet Laws, page 442.)

A SUPPLEMENT to an act, entitled "An act to erect Shirleysburg, in the county of Huntingdon, New Hope, in the countyof Bucks, and Hamburg, in the county of Berks, into boroughs, and for other purposes."

* * * * * * *

SEC. 51. That Henry Shaepneck, of the county of Greene, be and he is hereby, authorized to erect a mil-ldam in the Monongahela River, at his mill, in Cumberland Township, in said county, of the same height, and in the same manner, and under the same terms as is required by the sixteenth section of the act of the thirty-first day of March, eighteen hundred and thirty-six, entitled "An act to authorize the Governor to incorporate a company to make a lock navigation on the river Monongahela."

(Approved April 16, 1838. Pamphlet Laws, page 579.)

A SUPPLEMENT to an act entitled "An act to authorize the Governor to incorporate a company to make a lock navigation on the river Monongahela."

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same*, That any defect or irregularity in the proceedings of the Commissioners appointed by the act entitled "An act to authorize the Governor to incorporate a company to make a lock navigation on the river Monongahela," passed the thirty-first day of March, eighteen hundred and thirty-six, in taking subscription to and organ-

izing the said company, and any defect or irregularity in the proceedings of the Board of Managers of said company in organizing and conducting the affairs of the same, so far as the said defect or irregularity may have proceeded from the neglect or omission of the said Commissioners and Board of Managers fully to comply with the requisitions of the proviso to the first section of said act, shall be and the same are hereby remedied and supplied; and the acts and proceedings of the said Commissioners and Board of Managers which were in contravention of the said proviso shall be and are hereby declared valid and legal, as if the same had been fully complied with.

SEC. 2. The name, style, and title of the said company shall, from and after the passage of this act, be the "Monongahela Navigation Company."

SEC. 3. At all elections held by the stockholders every person holding ten or any less number of shares shall be entitled to one vote for every share so held and one vote for every additional ten shares: *Provided*, That no number of shares shall entitle the holder thereof to more than twenty votes. And so much of the proviso in the fourth section of the aforesaid act as conflicts with this section shall be, and is hereby, repealed.

SEC. 4. The said company shall be permitted to erect such dams as may be necessary for the construction of the said navigation below Brownsville to a height not exceeding eight feet from pool to pool. In selecting persons to assess damages occasioned by the construction of said navigation, no person shall be chosen who is a resident of any county through which the said improvement shall pass: *Provided*, That all the locks below the town of Elizabeth, in Allegheny County, on said river, be made one hundred and ninety feet long and fifty feet wide, and that all the locks below the town of Brownsville shall be of like dimensions.

SEC. 5. When the said navigation, or any portion thereof, shall be completed, the President and Managers shall be entitled to receive such rates of toll per mile, at their discretion, as may be just and reasonable, subject, however, to the control and regulation of the legislature if at any time complaint should be made to the same *Provided always*, That the net dividends on said stock shall not exceed twelve per cent. per annum, and the said company shall not be compelled to permit any boat or craft, except such as shall be hereinafter provided for, to pass toll free unless the dividends amount to twelve per cent. per annum.

SEC. 6. The penalty inflicted on said company by the eleventh section of said act for detention in passing the locks or sluices shall not be imposed unless occasioned by malice or culpable negligence on the part of the said company, its officers or agents.

SEC. 7. The said company shall be permitted to set apart, as a contingent fund for the purpose of defraying the expenses of extraordinary repairs, or other unforeseen expenditures to which said company may become liable, the sum of twenty per cent. of their tolls, interest, rents, and profits, annually, until the said contingent fund shall amount to fifty thousand dollars, but in the annual abstract of its accounts laid before the legislature the amount of such contingent fund shall be fully set forth.

SEC. 8. In case the Commonwealth should at any time purchase the improvement, made in pursuance of this act and the act to which this is a supplement, then the Commonwealth shall pay to the company such sum or sums of money, as, together with the next dividends, shall amount to the expense incurred in constructing said improvements and keeping it in repair, with eight per cent. per annum interest thereon,

SEC. 9. The limitation of six months for the commencement of action, as prescribed in the nineteenth section of the original act, is hereby extended to one year.

SEC. 10. The Monongahela Navigation Company shall have privilege to purchase and hold such lands as may be necessary to the full use and enjoyment of the water right secured to them by the original act.

SEC. 11. The time for obtaining a charter or grant from the State of Virginia, in relation to this improvement, is hereby extended to the thirty-first day of March, eighteen hundred and forty-two.

SEC. 12. The sixteenth section, together with such other portions of the act to which this is a supplement, as are hereby altered and supplied, shall be and are from henceforth repealed.

SEC. 13. The legislature reserves the right to alter, amend, or annul the charter of said company, at any time hereafter, in such manner, however, that no injustice shall be done to the corporators.

(Approved, June 24, 1839. Pamphlet Laws, page 454.)

AN ACT to provide for continuing the improvements of the State and for the payment of the interest on the public debt.

Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same:

* * * * * * *

SEC. 5. The Governor is hereby authorized and required, within thirty days after the passage of this act, to subscribe to the stock of the Monongahela Navigation

Company the sum of one hundred thousand dollars, which shall constitute the Commonwealth a stockholder in said company to that amount: *Provided*, That all descending crafts owned by citizens of Pennsylvania, not calculated or intended to return from any point between Millsborough and the Virginia State line, shall pass free of toll through any lock or dam of the lower division of said improvement, until the company shall put the first dam above Brownsville in the second division under contract, and complete the same, agreeably to the plan of said improvement.

(Approved June 11, 1840. Pamphlet Laws, page 647.)

AN ACT to provide revenue to meet the demands on the treasury, and for other purposes.

Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same:

* * * * * * *

SEC. 14. That the amount of the loan of three million one hundred thousand dollars, authorized by the first section of this act, when received, shall be specifically appropriated as follows: * * * To the Monongahela Navigation Company, seventy thousand dollars, being the unpaid balance of the last year's appropriation.

(Passed May 4, 1841. Pamphlet Laws, p. 312.)

RESOLUTION relative to the Monongahela Navigation Company.

Resolved by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same, That in case of a vacancy occurring in the office of president of the Monongahela Navigation Company, either by death, resignation, or otherwise, the Board of Managers shall have power to fill the vacancy by the election of any person who may be a stockholder in said company, and the person so elected shall hold and exercise all the powers, and receive all the emoluments appertaining to the office of president, until the next annual election of officers for said company. And it shall be lawful for the President and Managers of the Monongahela Navigation Company to raise by way of loan, at a rate of interest not exceeding six per cent. from any individual, bodies politic or corporate, on such terms and conditions as they may think fit, such sums of money as they may from time to time find expedient for the completion of said improvement upon the credit of the capital stock and incorporation, including the net proceeds of the tolls and profits of the same, and for the fulfillment of the terms and conditions of any such loan, to mortgage any part or the whole of their property, tolls, profits, or estates whatever, which mortgage or mortgages shall be transferable at any time hereafter on the books of the company: *Provided*, That the contract for said loan or loans shall be approved by the Governor.

(Approved May 4, 1841. Pamphlet Laws, page 444.)

AN ACT to authorize the construction of a toll-bridge over the river Schuylkill, at or near Windsor Haven, in Berks County, and for other purposes.

Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same:

* * * * * * *

SEC. 5. That it shall be lawful for the Board of Managers of the Monongahela Navigation Company, in addition to the amount they now owe, to borrow from time to time any sum or sums of money, not in the whole exceeding two hundred thousand dollars, to enable them to complete and repair their works and to carry on their business, and to secure the payment of the certificates to be given therefor, which certificates shall be in sums not less than one hundred dollars, and all other claims against the said company, to execute a mortgage or mortgages on their navigation and all other property, and on the tolls, rents, issues, and profits accruing therefrom, or any portion or portions thereof, and that in case of a sale under the said mortgage or mortgages the purchasers shall have and enjoy the same corporate privileges and the same rights in the mortgaged portion or portions of the said navigation, and in the collection of tolls, as the said Monongahela Navigation Company now have, and shall be authorized to organize and continue the corporation by the division of their capital into shares, and by the election of managers and officers in like manner; and

if the mortgage or mortgages shall so stipulate, the said Monongahela Navigation Company may continue in possession and management of the mortgaged property, as well personal as real, without prejudice to the security of the mortgage thereon: *Provided*, That no dividend of profits shall be made to the stockholders of the Monongahela Navigation Company while any loan which may have fallen due shall after demand remain unpaid: *And provided also*, That all profits arising from the business of the said company, after defraying the expenses thereof and of the completion and repairs of their works, shall be applied in the first place to the payment of the interest on all loans of the company, and then to the payment of the principal of all loans and other debts which for the time being shall be due and unpaid.

SEC. 6. All mortgages executed and acknowledged under the provisions of this act shall be recorded in the recorder's office of the county of Fayette within thirty days after such acknowledgment, and such recording shall be as good and effectual in law to all intents and purposes as if the same had been recorded in all the counties in which the said mortgaged property may be situated or be, and all legal proceedings had upon said mortgage shall be instituted in the Court of Common Pleas of Fayette County, whose judgment and final process shall be as effectual as if all property was situated in said county, and no proceeding shall be had on any such mortgage until the expiration of ten years from the date thereof, and in all cases of sale on any such mortgage the proceeds thereof shall be applied pro rata to the payment of all debts of said company of every description whatsoever.

(Approved April 5, 1842. Pamphlet Laws, page 232.)

AN ACT concerning the trust estate of Hugh Roberts, deceased, and for other purposes.

Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same:

* * * * * * *

SEC. 57. That the imposition of tolls by the "Monongahela Navigation Company" upon the works of the said company shall be subject to the following regulations:

First. That all coal-boats taking in their loading above lock and dam No. 3, on the Monongahela River, shall be permitted to pass through the locks on said river at a rate not exceeding one dollar per lock, for each boat in descending the same.

Second. That all new boats built on the Monongahela River above the said lock and dam shall pay the same rate of tolls as the same description of boats that navigate the said river between Brownsville and Pittsburgh.

Third. That so soon as lock and dam No. 3 shall be completed these regulations shall cease and have no effect as far up the said river as dam and lock No. 4, and when lock and dam No. 4 shall be completed, this act shall cease and determine.

SEC. 58. That if any lock-keeper or other officer on the works of the said company shall infringe any of the above regulations, or obstruct in any manner the passage of the boats subject to them, the said lock-keeper or other officer shall be subject to the same penalties contained in the eleventh section of the act to which this is a supplement.

(Approved July 16, 1842. Pamphlet Laws, page 389.)

AN ACT to provide for the ordinary expenses of the government, payment of the interest upon the State debt, receiving of proposals for the sale of the public works, and for other purposes.

Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same:

* * * * * * *

SEC. 4. That the Governor is hereby authorized to sell, transfer, and convey, at public sale, at such place or places as he may deem proper, any of the bank, turnpike, bridge, canal, navigation, or railroad stock, in any incorporated company, held and owned by the Commonwealth of Pennsylvania, to the highest bidder or bidders, his, her, or their assigns, after having caused sixty days' public notice to be given of the time and place of such sale, in Harrisburg, Philadelphia, Pittsburgh, and the county or counties in which the improvements or banks are located of which the stock is offered for sale: *Provided*, That no share of stock shall be sold for less than an amount which, at the rate of five per cent., would produce an interest equal to the dividend received by the State on said stock for the year eighteen hundred and forty-one.

SEC. 5. That it shall be lawful for the State Treasurer to receive in payment of any of the stocks, hereinbefore authorized to be sold, certificates of State stock, or the amount, or any part thereof, of any credit given to any person on the books of the

Auditor-General, in pursuance of the provisions of the resolution of the seventh of April last; and that if no sale shall be effected of the said stock at the time the same may be publicly offered for sale, then any creditor of the State, holding certificates of stock, or having a credit as aforesaid, shall be allowed to exchange such stock or such credit at par, for any of the bank, bridge, canal, navigation, railroad, or turnpike stock owned by this Commonwealth at the rates stipulated in the proviso to the fourth section.

(Approved July 27, 1842. Pamphlet Laws, page 443.)

AN ACT extending the time for the completion of the lock navigation on the river Monongahela, and for other purposes.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same,* That the time fixed for the completion of the lock navigation on the Monongahela River by the seventeenth section of the act entitled "An act to authorize the Governor to incorporate a company to make a lock navigation on the river Monongahela," passed on the thirty-first day of March, eighteen hundred and thirty-six, be, and the same is hereby, extended for another period of seven years from the passage of this act.

SEC. 2. The time for commencing the Hamburg, Allentown, Bethlehem and Easton Railroad be, and the same is hereby, extended to three years, and the time for completing the said road to eight, from and after the passage of this act.

(Approved March 31, 1843. Pamphlet Laws, page 119.)

AN ACT to provide for the payment of the domestic creditors of this Commonwealth, sale of State stocks, and for other purposes.

Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same:

* * * * * * *

SEC. 4. That Evans Rogers, of the city of Philadelphia, James Clark, of the county of Indiana, and the State Treasurer be, and they are hereby, appointed Commissioners to sell, transfer, and convey, at public or private sale, at such times and places and in such amounts as they may deem proper, any or all of the bank, turnpike, bridge, canal, railroad, or navigation stocks in any incorporated company held and owned by the Commonwealth of Pennsylvania, at such price or prices as they may deem the same worth, in such payment as is hereinafter directed; and it shall be the duty of the said Commissioners to pay into the State treasury all the money arising from said sales as soon after the receipt thereof as possible; and they shall deliver to the Auditor-General the certificates of indebtedness hereinafter authorized to be received in payment of said stocks, who shall note the payments of the same on his books: *Provided,* That it shall not be lawful for the said Commissioners, or either of them, to become the purchasers of said stock, or any portion thereof, directly or indirectly: *Provided further,* That the Commission created by this act shall continue until first January next, and no longer.

SEC. 5. It shall be lawful for the State Treasurer to receive, in payment for said stocks, certificates of credits, entered on the books of the Auditor-General, in pursuance of a resolution of the legislature passed the seventh day of April, eighteen hundred and forty-two, notes issued by the banks of this Commonwealth, in pursuance of the act of the fourth of May, eighteen hundred and forty-one, or specie, or the notes of specie-paying banks; and the purchaser or purchasers of said stock, after the same has been transferred, shall have the same right to vote at the election for officers, or on any other question, in any incorporated company, in the same way as though they had originally been subscribers to said stock; and it shall be lawful for the managers or directors of an incorporated company, in which the State holds stocks, to purchase from the Commonwealth, through the aforesaid Commissioners, the shares of stock owned be the Commonwealth in the said companies respectively.

SEC. 6. Said Commissioners shall commence and complete said sales as soon after the passage of this act as may appear consistent with the interest of the Commonwealth; they shall keep an accurate record of their proceedings, and shall communicate to the legislature, at its next session, a statement of the same, designating the stocks sold, the names of the purchasers, and the price received; and the said Commissioners shall be allowed and paid out of the State treasury, on the presentation of an account, properly authenticated, in full for their services, three dollars per day for

every day actually employed in the service of the Commonwealth in pursuance of the provisions of this act, and ten cents per mile circular for traveling from place to place to effect said sales, except the State Treasurer, who shall be entitled to mileage only: *Provided*, That before entering upon the aforesaid duties said Commissioners shall severally take and subscibe, before some Alderman or Justice of the Peace, an oath or affirmation to discharge the trust confided to them by this act with honesty and fidelity: *Provided also*, That in case a vacancy should occur in said Board of Commissioners, by death, resignation, or otherwise, it shall be the duty of the Governor to supply such vacancy by appointment.

(Approved April 8, 1843. Pamphlet Laws, page 182.)

AN ACT declaratory of the act passed the thirty-first day of March, Anno Domini eighteen hundred and thirty-six, entitled "An act to authorize the Governor to incorporate a company to make a lock navigation on the river Monongahela."

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same*, That the President, Managers, and company of the Monongahela Navigation Company shall make amends for any damages done, or that may be done, to lands and property lying upon the Monongahela River or its branches and tributary streams by overflowing the same; and that the act passed the thirty-first day of March, Anno Domini eighteen hundred and thirty-six, authorizing the incorporation of the said company, and the supplement thereto, passed twenty-fourth June, eighteen hundred and thirty-nine, shall not be construed so as to injure, destroy, or impair any right, privilege, or legal claim which may have been granted to others by act of assembly heretofore passed, authorizing the erection of dams on any of the branches or tributaries of said river; nor so as to permit said company to injure, destroy, or affect injuriously the usefulness of any mill-dam, mill, or other structure erected on or near said branches or tributaries, without compensation to the owners thereof, to be ascertained in the same manner as prescribed by the said act of the thirty-first day of March, Anno Domini eighteen hundred and thirty-six.

(Approved April 25, 1844. Pamphlet Laws, page 390.)

A FURTHER SUPPLEMENT to "An act to authorize the Governor to incorporate a company to make a lock navigation on the river Monongahela."

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same*, That the eighth section of the act entitled "An act to authorize the Governor to incorporate a company to make a lock navigation on the river Monongahela," approved the thirty-first day of March, eighteen hundred and thirty-six, which authorizes the use and occupancy of ground and materials for the purpose of constructing said navigation, shall be so construed as to include sufficient ground at each lock, for the purpose of erecting thereon a lockhouse, to be occupied by the lock-keeper and his hands: *Provided*, That not more than half an acre shall be taken at any lock for this purpose, the value of said ground to be assessed as provided for in the aforesaid act and supplement thereto approved the twenty-fourth day of June, eighteen hundred and thirty-nine; and the said company is further required, in accordance with the direction of the fourth section of the seventh article of the constitution of Pennsylvania, to make compensation to the owners of said property, or give adequate security therefor, before such property shall be taken under the provisions of this act.

(Approved January 31, 1845. Pamphlet Laws, page 13.)

AN ACT relating to the navigation or the Youghiogheny River.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same*, That from and after the passage of this act so much of the provisons of the fifth section of the act of eleventh June, eighteen hundred and forty, entitled "An act to provide for continuing the improvements of the State, and for the payment of the interest on the State debt," which provides that all descending crafts owned by citizens of Pennsylvania, and not intending to return, shall pass free from toll on the lower

division of the Monongahela improvement, is hereby extended to the Youghiogheny River; and hereafter all boats, rafts, arks, and other crafts descending the Youghiogheny River, owned by citizens of Pennsylvania, and not calculated or intended to return, shall pass free of toll or other charge through any lock or locks, dam or dams, of the Monongahela Navigation Company.

(Approved April 15, 1845. Pamphlet Laws, page 447.)

AN ACT relative to stocks in incorporated companies purchased of the commonwealth, and for other purposes.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same,* That the Auditor-General be, and he is hereby, authorized and required to assign, transfer, and deliver to the purchaser or purchasers of stocks owned by the Commonwealth in any company, sold under the provisions of the act of eighth of April, Anno Domini eighteen hundred and forty-three, entitled "An act for the payment of the domestic creditors of the Commonwealth, sale of State stock, and for other purposes," any certificate or certificates of stock held by the State in any such companies, which may be in his or any other public office in Harrisburg, agreeably to the provisions of any act incorporating any such company.

SEC. 2. That in all cases hereafter where the President and Managers of any of the above companies shall neglect or refuse to give notice for holding the annual elections at the time now required by law, it shall be lawful for any five stockholders to give public notice in one or more newspapers, as soon as possible after the first failure, which notice shall not be less than twenty days previous to the election, and any election held in pursuance of said notice shall be as valid as if it had been called by the President and Managers.

(Approved April 3, 1846. Pamphlet Laws, page 239.)

A FURTHER SUPPLEMENT to an act to authorize the Governor to incorporate a company to construct a slackwater navigation in the Monongahela River.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by authority of the same,* That it shall and may be lawful for the President and Managers of the Monongahela Navigation Company, by any general regulation to be by them adopted for that purpose, to require the clerks, captain, or other chief officers of all steamboats or other crafts carrying passengers on board, and passing through any of the locks of the said company on the Monongahela River, to make returns upon oath, to the collector or lock-keepers at the said locks, or any of them, whenever, at such times, and in such manner as the same may be by the said President and Managers directed to be done, of the whole number of passengers by them or by the boats whereon they are employed, respectively, carried through the said locks, or any of them, and in the case of way passengers, of the number of locks by them respectively passed of, for, and during the whole period or periods to which the said returns shall be required to extend.

SEC. 2. That if any clerk, captain, or other chief officer of any such steamboat or other craft as aforesaid shall at any time neglect or refuse to comply with the regulations of the said company, so established as aforesaid, he or they shall, for every such neglect or refusal, forfeit to the said company the sum of ten dollars, to be recovered by them as debts of the like amount are by law recoverable.

SEC. 3. That if any clerk, captain, or any other chief officer of any such steamboat or other craft as aforesaid shall swear falsely touching any matter set forth in the said return by him or them so required to be made as aforesaid, with the intent to defraud the said company of any portion of their just and reasonable tolls upon any the said passengers, he or they so offending shall be deemed guilty of willful and corrupt perjury, and shall, on conviction thereof, be subject to all the pains and penalties provided by law against that offense.

SEC. 4. This act shall not have the force and effect of law unless and until the said Monongahela Navigation Company shall accept, and continue to observe, all the provisions of the act entitled "An act relating to the navigation of the Youghiogheny River," passed the fifteenth day of April, eighteen hundred and forty-five: *Provided, however,* That so soon as the said Monongahela Navigation Company, or any other company, shall proceed in the improvement of the Youghiogheny River, and shall erect and complete one dam and the necessary lock or locks in said river, then the said Monongahela Navigation Company shall be authorized to charge half tolls on the va-

rious crafts mentioned in the said act of fifteenth April, eighteen hundred and forty-five; and that so soon as a second dam, with the necessary lock or locks, shall be erected and completed in the said Youghiogheny River, the then condition imposed by this section shall be released, and the provisions of the said act of fifteenth April, eighteen hundred and forty-five, shall cease to be obligatory on the said Monongahela Navigation Company.

(Approved March 24, 1846. Pamphlet Laws, page 168.)

A FURTHER SUPPLEMENT to the penal laws of this Commonwealth.

Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same.

* * * * * * *

SEC. 3. The penalty imposed by the second section of the act entitled "A further supplement to the act entitled 'An act to authorize the Governor to incorporate a company to construct a slackwater navigation in the Monongahela River,' approved the twenty-fourth day of March, eighteen hundred and forty-six," shall be fifty dollars; and the same shall be recoverable in like manner as if the penalty had been made fifty dollars in the said section of the said act.

(Approved April 17, 1846. Pamphlet Laws, page 362.)

A FURTHER SUPPLEMENT to an act authorizing the incorporation of the Monongahela Navigation Company.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same,* That the President and Managers of the Monongahela Navigation Company be, and they are hereby, authorized to open books of subscription at such places within the counties of Allegheny, Washington, Westmoreland, Fayette, and Greene as they may think proper to indicate, upon thirty days' notice, by publication in one or more newspapers published within each of the said counties, for the purpose of enlarging their capital stock, so as to enable them to extend their improvement to the Virginia State line: *Provided*, the stock hereby authorized to be subscribed shall not exceed two hundred thousand dollars.

SEC. 2. That as soon as three thousand additional shares shall be subscribed to the stock of the said company for the purpose aforesaid, it shall be the duty of the said President and Managers to contract for the construction of so many additional locks and dams as may be required to secure a sufficient slackwater navigation from the borough of Brownsville to the said State line, or so many additional locks and dams as the amount of stock so subscribed as aforesaid shall in their estimation be sufficient to authorize them to place under contract.

SEC. 3. That in the prosecution of said extension, it shall be lawful for the said company to increase the height of dam number four, not exceeding two feet, after the completion of lock and dam number five, above Brownsville, and to construct the additional dams, in such manner and of such elevation as they may deem expedient, having regard, however, to the natural formation of the banks; and making compensation for any damage, direct or consequential, which may or has been occasioned to private property by the said dams, or those already constructed: *Provided*, That if the parties cannot agree in choosing five freeholders to view and assess the damages, the same shall hereafter be appointed by the Court of Common Pleas of the proper county, and not by a justice of the peace, as is provided for in the eighth section of the act of incorporation, passed the thirty-first day of March, eighteen hundred and thirty-six: *Provided, further*, That said jurors shall be citizens of the county in which said damages are alleged to have been sustained, but shall not live or own real estate within ten miles of said improvement, nor shall any of them be stockholders in said Monongahela Navigation Company: *And provided further*, That said company shall be liable for all consequential damages resulting to the owner or owners of real property situate upon either side of said improvement.

SEC. 4. That the tolls received upon and the revenues arising from that part of the work between Brownsville and the Virginia State line shall form a separate and distinct fund, and the balance thereof, after payment of expenses and repairs on that portion of the work, shall be divided semi-annally, pro rata, amongst the stockholders. whose subscriptions may be applied, under this act, to the construction of

division of the Monongabela improvement, is hereby extended to the Youghiogheny River; and hereafter all boats, rafts, arks, and other crafts descending the Youghiogheny River, owned by citizens of Pennsylvania, and not calculated or intended to return, shall pass free of toll or other charge through any lock or locks, dam or dams, of the Monongahela Navigation Company.

(Approved April 15, 1845. Pamphlet Laws, page 447.)

AN ACT relative to stocks in incorporated companies purchased of the commonwealth, and for other purposes.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same,* That the Auditor-General be, and he is hereby, authorized and required to assign, transfer, and deliver to the purchaser or purchasers of stocks owned by the Commonwealth in any company, sold under the provisions of the act of eighth of April, Anno Domini eighteen hundred and forty-three, entitled "An act for the payment of the domestic creditors of the Commonwealth, sale of State stock, and for other purposes," any certificate or certificates of stock held by the State in any such companies, which may be in his or any other public office in Harrisburg, agreeably to the provisions of any act incorporating any such company.

SEC. 2. That in all cases hereafter where the President and Managers of any of the above companies shall neglect or refuse to give notice for holding the annual elections at the time now required by law, it shall be lawful for any five stockholders to give public notice in one or more newspapers, as soon as possible after the first failure, which notice shall not be less than twenty days previous to the election, and any election held in pursuance of said notice shall be as valid as if it had been called by the President and Managers.

(Approved April 3, 1846. Pamphlet Laws, page 239.)

A FURTHER SUPPLEMENT to an act to authorize the Governor to incorporate a company to construct a slackwater navigation in the Monongahela River.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by authority of the same,* That it shall and may be lawful for the President and Managers of the Monongahela Navigation Company, by any general regulation to be by them adopted for that purpose, to require the clerks, captain, or other chief officers of all steamboats or other crafts carrying passengers on board, and passing through any of the locks of the said company on the Monongahela River, to make returns upon oath, to the collector or lock-keepers at the said locks, or any of them, whenever, at such times, and in such manner as the same may be by the said President and Managers directed to be done, of the whole number of passengers by them or by the boats whereon they are employed, respectively, carried through the said locks, or any of them, and in the case of way passengers, of the number of locks by them respectively passed of, for, and during the whole period or periods to which the said returns shall be required to extend.

SEC. 2. That if any clerk, captain, or other chief officer of any such steamboat or other craft as aforesaid shall at any time neglect or refuse to comply with the regulations of the said company, so established as aforesaid, he or they shall, for every such neglect or refusal, forfeit to the said company the sum of ten dollars, to be recovered by them as debts of the like amount are by law recoverable.

SEC. 3. That if any clerk, captain, or any other chief officer of any such steamboat or other craft as aforesaid shall swear falsely touching any matter set forth in the said return by him or them so required to be made as aforesaid, with the intent to defraud the said company of any portion of their just and reasonable tolls upon any the said passengers, he or they so offending shall be deemed guilty of willful and corrupt perjury, and shall, on conviction thereof, be subject to all the pains and penalties provided by law against that offense.

SEC. 4. This act shall not have the force and effect of law unless and until the said Monongahela Navigation Company shall accept, and continue to observe, all the provisions of the act entitled "An act relating to the navigation of the Youghiogheny River," passed the fifteenth day of April, eighteen hundred and forty-five: *Provided, however,* That so soon as the said Monongahela Navigation Company, or any other company, shall proceed in the improvement of the Youghiogheny River, and shall erect and complete one dam and the necessary lock or locks in said river, then the said Monongahela Navigation Company shall be authorized to charge half tolls on the va-

rious crafts mentioned in the said act of fifteenth April, eighteen hundred and forty-five; and that so soon as a second dam, with the necessary lock or locks, shall be erected and completed in the said Youghiogheny River, the then condition imposed by this section shall be released, and the provisions of the said act of fifteenth April, eighteen hundred and forty-five, shall cease to be obligatory on the said Monongahela Navigation Company.

(Approved March 24, 1846. Pamphlet Laws, page 168.)

A FURTHER SUPPLEMENT to the penal laws of this Commonwealth.

Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same.

* * * * * * *

SEC. 3. The penalty imposed by the second section of the act entitled "A further supplement to the act entitled 'An act to authorize the Governor to incorporate a company to construct a slackwater navigation in the Monongahela River,' approved the twenty-fourth day of March, eighteen hundred and forty-six," shall be fifty dollars; and the same shall be recoverable in like manner as if the penalty had been made fifty dollars in the said section of the said act.

(Approved April 17, 1846. Pamphlet Laws, page 362.)

A FURTHER SUPPLEMENT to an act authorizing the incorporation of the Monongahela Navigation Company.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same*, That the President and Managers of the Monongahela Navigation Company be, and they are hereby, authorized to open books of subscription at such places within the counties of Allegheny, Washington, Westmoreland, Fayette, and Greene as they may think proper to indicate, upon thirty days' notice, by publication in one or more newspapers published within each of the said counties, for the purpose of enlarging their capital stock, so as to enable them to extend their improvement to the Virginia State line: *Provided*, the stock hereby authorized to be subscribed shall not exceed two hundred thousand dollars.

SEC. 2. That as soon as three thousand additional shares shall be subscribed to the stock of the said company for the purpose aforesaid, it shall be the duty of the said President and Managers to contract for the construction of so many additional locks and dams as may be required to secure a sufficient slackwater navigation from the borough of Brownsville to the said State line, or so many additional locks and dams as the amount of stock so subscribed as aforesaid shall in their estimation be sufficient to authorize them to place under contract.

SEC. 3. That in the prosecution of said extension, it shall be lawful for the said company to increase the height of dam number four, not exceeding two feet, after the completion of lock and dam number five, above Brownsville, and to construct the additional dams, in such manner and of such elevation as they may deem expedient, having regard, however, to the natural formation of the banks; and making compensation for any damage, direct or consequential, which may or has been occasioned to private property by the said dams, or those already constructed: *Provided*, That if the parties cannot agree in choosing five freeholders to view and assess the damages, the same shall hereafter be appointed by the Court of Common Pleas of the proper county, and not by a justice of the peace, as is provided for in the eighth section of the act of incorporation, passed the thirty-first day of March, eighteen hundred and thirty-six: *Provided, further*, That said jurors shall be citizens of the county in which said damages are alleged to have been sustained, but shall not live or own real estate within ten miles of said improvement, nor shall any of them be stockholders in said Monongahela Navigation Company: *And provided further*, That said company shall be liable for all consequential damages resulting to the owner or owners of real property situate upon either side of said improvement.

SEC. 4. That the tolls received upon and the revenues arising from that part of the work between Brownsville and the Virginia State line shall form a separate and distinct fund, and the balance thereof, after payment of expenses and repairs on that portion of the work, shall be divided semi-annally, pro rata, amongst the stockholders. whose subscriptions may be applied, under this act, to the construction of

the same, until the company shall have paid the debt incurred in the coustruction of the work below the borough of Brownsville; after which, the said tolls and revennes shall return to the common fund, and be distributed, with the other revenues of the said work, amongst all the stockholders thereof, in the proportion of the amount of stock held by them respectively: *Provided*, That the minimum through toll on the ascending transportation of passengers, produce, and merchandise, destined to pass over any portion of the Baltimore and Ohio Railroad, except coal and other minerals, shall not be less on said improvements than may be charged for an equal distance on the Pennsylvania Canal.

SEC. 5. That the President and Managers of the said company shall have power, from time to time, to make such rules and regulations as may not be inconsistent with the laws of this State, in respect to the weighing and inspecting of boats and other craft, and their lading, the collection of tolls, and all other matters connected with the use or navination of their improvement.

SEC. 6. That the President and Managers of the said Monongahela Navigation Company be, and they are hereby, authorized to open books of subscription at such time and place within the city of Pittsburgh as they may think proper to direct, upon at least thirty days' notice thereof, by publication in one or more newspapers in the cities of Pittsburgh and Philadelphia, for the subscription of so much additional stock in the said company as shall be required to pay and satisfy the debt incurred in the construction of that portion of their improvement which is already completed over and beyond the amount of the capital stock already subscribed, paid in, and expended for the purpose; that the said books of subscription shall continue open, for the purpose aforesaid, for the space of twenty days, and if at the expiration of that time the sum required shall not have been subscribed it shall be lawful for the said President and Managers, and they are hereby required to enter, to the credit of the holders of the present stock in the books of the said company, an additional share of stock for each and every share by them respectively owned and held therein, upon which said additional share or shares the Treasurer of the said company shall, in lieu of all calls for the payment of any installment or installments thereupon, credit to the holders thereof, respectively, his, her, or their pro rata proportion, according to the amount of stock by them respectively owned, of the amount applied, from time to time, out of the tolls, income, profits, and revenues of the said company, toward the satisfaction of the principal and interest of the debts incurred in the construction of that portion of their improvement between the city of Pittsburgh and the borough of Brownsville; and as soon as the sum of fifty dollars shall be thus credited to each and every share of the said additional stock, it shall be the duty of the said President and Managers to issue certificates therefor to the persons who may then be the holders of the original stock, and entitled thereto respectively; andwho shall thereafter vote, and be entitled to receive dividends upon the said new stock of the incomes or profits of the said company, as though the same had been originally subscribed at the opening of the books thereof: *Provided, however*, That any and every transfer that may be made of the present or old stock, or any portion thereof, by any of the holders thereof, antecedent to the payment of the whole of the said sum of fifty dollars, upon each and every of the shares of the said new or additional stock, shall be held and construed to carry with it the interest of the proprietor in the said new or additional stock, which, until that period, shall follow the ownership of the said original stock as an incident or accessory thereto, and be inseparable therefrom: *Provided*, That when the dividends of profits made by the company shall exceed ten per cent. per annum on the amount of the capital stock representing the cost of the work, one-half of the surplus above ten per cent. shall be paid into the treasury of the Commonwealth; and the clause in the fifteenth section of the original act of incorporation requiring an annual statement to be made to the legislature is hereby re-enacted.

SEC. 7. That the toll on coal shall not be raised by the company at any time above the rates now charged on that article.

SEC. 8. That so much of any act or acts of assembly as may be inconsistent with any of the foregoing provisions be, and the same is, hereby repealed.

(Approved February 9, 1848. Pamphlet Laws, page 39.)

A SUPPLEMENT to an act entitled "An act to authorize the Governor to incorporate a company to make a lock navigation on the Youghiogheny River," passed the eighteenth day of April, Anno Domini eighteen hundred and forty-three.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same*, That any defect or irregularity in the proceedings of the commissioners appointed by the original act, in taking subscription to and organizing the said company, and any defect or irregularity in the proceedings of the Board of Managers of

said company, in organizing and conducting the affairs of the same, so far as the said defect or irregularity may have proceeded from the neglect or omission of the said commissioners and board of managers fully to comply with the requisitions of the first section of said act, in regard to the opening of the books for the subscription of stock, or with the requisitions of the proviso of the first section of said act, shall be and the same are hereby remedied and supplied; and the acts and proceedings of the said commissioners and board of managers which were in contravention of the said first section, and the proviso thereto, shall be, and are hereby, declared valid and legal as if the same had been fully complied with.

SEC. 2. That from and after the passage of this act, the name, style, and title of the said company shall be the "Youghiogheny Navigation Company."

SEC. 3. That it shall be the duty of the said Youghiogheny Navigation Company to remove the obstructions to the safe navigation of said river from its mouth at McKeesport to the borough of West Newton, and keep the same safe for the navigation thereof; and that the said company shall enjoy the privilege, right, and power to collect toll on that part thereof from the mouth of said river to dam and lock No. 1, at corresponding rates with the pools above; and also that the said company shall have and enjoy like rights, privileges, advantages, remedies, and powers, as well in regard to the recovery of damages, penalties, and forfeitures for injuries done to the navigation, or any of the works or property of said company, as in regard to the collection of subscriptions of stock in said company, as are given and granted to the Monongahela Navigation Company by any act or acts of assembly heretofore passed in relation thereto: *Provided, however*, That the said company shall reimburse to the Monongahela Navigation Company the amount of money which may have been expended by them in payment of damages for injuries done to private property along the said last-described portion of the said Youghiogheny, from the mouth thereof to the first dam as aforesaid, by reason of the back-water or flowage occasioned by the construction of dam No. 2 of the Monongahela Navigation Company, to the ascertained and agreed amount of four thousand dollars, to be paid in the capital stock of said Youghiogheny Navigation Company, which amount the President and Managers of the said Monongahela Navigation Company are hereby authorized to subscribe to the said capital stock: *And provided also*, That the said Monongahela Navigation Company shall not, at any time, charge or collect a greater amount of toll from boats, etc., that pass out of the mouth of the Youghiogheny River into the Monongahela River than they do for the same distance on their own improvement: *Provided, moreover*, That the said Youghiogheny Navigation Company shall be liable for any damages that may be occasioned to any property situated on either side of said improvements, in like manner as the Monongahela Navigation Company is now made liable by the third section of an act entitled "A further supplement to an act authorizing the incorporation of the Monongahela Navigation Company," approved the ninth day of February, eighteen hundred and forty-eight: *And provided further*, That said viewers shall take into consideration the advantages arising from said improvement.

SEC. 4. That the Board of Managers of the Youghiogheny Navigation Company shall have power to make such rules and regulations as may not be inconsistent with the laws of this State, in respect to the collection of tolls and all other matters connected with the use or navigation of their improvement, from the mouth of said river to West Newton.

SEC. 5. That the said company shall at no time hereafter charge more than half toll or poolage on any raft or boat, or the cargo thereof, descending said river and not intending to return, which may have been loaded above the line dividing the counties of Fayette and Westmoreland: *Provided*, That rafts or boats shall not use the harbors created by said improvement for a period of more than ten days: *And provided further*, That after the West Newton and Connellsville Navigation Company shall have completed the first dam and lock, the said Youghiogheny Navigation Company may charge such tolls as they may by law charge on freight boats and rafts loaded below said line.

SEC. 6. That Henry Greenewalt, guardian of Angelina and Caleb Greenewalt, minor children of Daniel Greenewalt, deceased, of Westmoreland County, be, and he is hereby, authorized to sell and convey to the Youghiogheny Navigation Company a certain part of a tract of land lying on the Youghiogheny River, and adjoining dam No. 2 on said improvement, and not exceeding in area one acre.

(Approved March 15, 1849. Pamphlet Laws, page 170.)

A FURTHER SUPPLEMENT to the act incorporating the Monongahela Navigation Company.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same*, That from and after the passage of this act, all rafts, flats, and flat-boats de-

scending the river, from any point more than three miles above Brownsville, and within the State of Pennsylvania, and not intending to return, shall not be subject to a higher toll than seventy-five cents per lock, including cargo, until the company shall complete the first dam above Brownsville: *Provided*, That no such craft shall take in any additional cargo on the line of the improvement, nor use or lie by in any of the harbors created by the improvement, for a period of more than ten days, without being subject to the payment of the regular tolls.

SEC. 2. That the present rates of toll on coal shall be reduced by the company fifty per cent. on pools numbers three and four, on all coal carried in flat-boats intended to pass down the Ohio River; and in consideration thereof the legislature shall not further reduce the tolls until the present indebtedness of the company shall have been fully paid, and a dividend of eight per cent. per annum paid to the stockholders; and no reduction shall be made at any time, so as to afford a less dividend than eight per cent. per annum on the capital stock: *Provided*, That the terms of this act shall not be so construed as to affect or alter the provisions of the act passed in the year eighteen hundred and forty-eight, requiring the company to pay one-half the dividends above ten per cent. per annum into the treasury of the Commonwealth.

SEC. 3. That so much of any act or acts to which this is a supplement as are hereby altered or amended shall be, and the same are hereby, repealed.

SEC. 4. The legislature reserves the right to alter or amend the charter of said company at any time hereafter, should they violate, abuse, or misuse the privileges granted, and such fact be previously found by the verdict of a jury and judgment of the proper court thereon, under a writ of *scire facias* issued against them at the suit of any individual or individuals who may be aggrieved.

(Approved March 21, 1849. Pamphlet Laws, page 215.)

AN ACT to facilitate the passage of coal and coke boats over the Monongahela Navigation Improvement, and to incorporate the Marine Transportation Company of Philadelphia.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same*, That no coal or coke boat shall unnecessarily stop, lie by, or detain in any lock, or within two hundred yards of any lock, nor shall they lie more than two pair abreast for a distance of three hundred yards further above any lock, nor more than four pair of boats abreast at any place above five hundred yards, without permission of the lock-keeper, under a penalty of twenty-five dollars for every boat.

SEC. 2. No coal or coke boat shall be permitted to come within two hundred yards of a lock on the Monongahela Navigation aforesaid, until the lock is ready, without the consent of the lock-keeper; and they shall be passed in the order of their position, viz: To commence with those within two hundred yards of the lock—inside boat or pair of boats first, the others to drop down so that each tier of boats shall be passed in the order they lie; and no coal or coke boat or boats arriving shall be permitted to come nigher to the lock than their regular place or tier. And when the lock-keeper is prepared to pass boats, they will in the order above mentioned, without delay, drop their boats down and pass through the lock otherwise, or forfeit their turn; but as cases may occur that light boats may go on when heavy boats cannot, then in such cases said light boats can at the discretion of the lock-keeper be passed through as they arrive within two hundred yards of the lock. The penalty for every violation of this section shall be ten dollars for each and every boat.

SEC. 3. That in case of the arrival of a large number of boats and a falling river, the lock-keeper shall be authorized to stop all tow-boats from passing as long as he may deem necessary.

SEC. 4. That the lock-keeper for the company or any person or persons aggrieved by any violation of this act, be, and they are hereby, authorized to enforce the foregoing provisions against the owners, pilots, or other persons having said boat or boats in charge, by process now known or which may hereafter be authorized by law, before any magistrate of the proper county or alderman of the city of Pittsburgh, one-half of the penalty to go to the State and the other half to the prosecutor.

(Approved April 14, 1851. Pamphlet Laws, page 563.)

A FURTHER SUPPLEMENT to the act incorporating the Monongahela Navigation Company.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same*, That for the purpose of enabling the Monongahela Navigation Company to extend their works, the said company are hereby authorized to increase their capital,

by receiving subscriptions thereto, to any amount not exceeding three hundred thousand dollars; and the said company are hereby required to put lock and dam number five under contract within sixty days after the passage of this act, and complete the same for navigation by the first of June, Anno Domini eighteen hundred and fifty-five, and sooner if practicable; and that lock and dam number six shall be put under contract within the present year, and completed on or before the first day of December, eighteen hundred and fifty-five, and sooner if practicable; and that a sufficient number of locks and dams to continue the improvement to the Virginia State line, above lock and dam number six, shall be put under contract as soon as twenty-five thousand dollars shall be subscribed to the capital stock of said company by the citizens of Green and Fayette Counties, Pennsylvania, and the citizens of Virginia, and shall be completed within one year after said subscription is made; but in no event shall the completion of the locks and dams above number six be delayed after the first day of December, eighteen hundred and fifty-seven, but shall, at said time, be fully completed for all the purposes of navigation, and sooner if practicable: *Provided*, That the said company shall not hereafter be liable for damages which may be done to property lying in the vicinity of any portion of their line, except as is provided by an act entitled "An act to authorize the Governor to incorporate a company to make a lock navigation on the river Monongahela," passed the thirty-first day of March, Anno Domini eighteen hundred and thirty-six, and an act entitled "An act declaratory of the act passed on the thirty-first day of March, eighteen hundred and thirty-six, entitled 'An act to authorize the Governor to incorporate a company to make a lock navigation on the river Monongahela,'" approved on the twenty-fifth day of April, eighteen hundred and forty-four.

SEC. 2. That the said company are hereby authorized to issue stock, and distribute the same, or the proceeds of the sale thereof, pro rata, amongst the owners of the present stock of the company, to an amount equal to the sum or sums which may have been expended in the construction of their improvement, and which has not heretofore been represented by stock in the company; and also for such further amount as may hereafter be applied, out of the earnings of the company, towards the construction of the extension hereby authorized, or to the payment of the principal or interest upon any bonds or obligations of debt which have been or may be issued for the construction or extension of said improvement.

SEC. 3. That when lock and dam number five shall have been completed and ready for navigation, the said company shall be entitled to charge and receive, on any part of their improvement, such rates of toll and charges as shall be just and reasonable: *Provided always*, That the net dividends shall not exceed the limitation prescribed by the fifth section of the supplement to an act entitled "An act to authorize the Governor to incorporate a company to make a lock navigation on the river Monongahela," passed June twenty-four, Anno Domini eighteen hundred and thirty-nine; the said dividends to be declared semi-annually on the second Thursday of January and July in each year: *Provided*, That the rates of toll and charges upon coal shall not at any time be increased above the rates at present charged upon the same.

SEC. 4. That all subscriptions heretofore made to the stock of said company are hereby legalized and made valid and effectual, to all intents and purposes, notwithstanding any defect in the manner or form of subscribing the same; and that said company are hereby authorized to pay interest at the rate of six per centum per annum upon all payments which may be made on account of subscriptions to the increased capital stock authorized by this act, until the completion of the navigation to the Virginia State line, after which time the owners of such increased stock shall be entitled to the same privileges and immunities as the other stockholders of said company.

SEC. 5. That the annual meeting of stockholders for the election of officers, as provided for in the fourth section of the charter of said company, shall hereafter be held on the second Thursday of January in each and every year; and at all the meetings of the stockholders each stockholder shall be entitled to one vote for each and every share of stock held by him.

SEC. 6. That so much of any act or acts of Assembly as are hereby altered, amended, or supplied, be, and the same is hereby, repealed.

(Approved January 25, 1854. Pamphlet Laws, page 8.)

A FURTHER SUPPLEMENT to the act incorporating the Monongahela Navigation Company.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same*, That the times limited for the completion of the locks and dams, numbers five and six, by the Monongahela Navigation Company, as provided by the supplement

to the charter of said company, passed the twenty-fifth day of January, eighteen hundred and fifty-four, be, and the same are hereby, extended to the thirty-first day of December, eighteen hundred and fifty-five; and the time limited for the completion of the works above dam number six, to the Virginia State line, be, and the same is hereby, extended for a further period of four years from and after the passage of this act; and so much of said act as is inconsistent herewith, be, and the same is hereby, repealed.

(Approved May 4, 1855. Pamphlet Laws, page 60.)

FURTHER SUPPLEMENT to the act incorporating the Monongahela Navigation Company, approved March thirty-one, eighteen hundred and thirty-six.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same,* That whenever the construction of sufficient locks and dams to extend the slackwater on the Monongahela River from the Pennsylvania State line to Morgantown, in Monongalia County, Virginia, shall have been commenced, it shall be the duty of the Monongahela Navigation Company to commence the construction of lock and dam number seven, in such manner and on such plan as will extend the navigation from its present terminus to the Virginia State line, and complete the same simultaneously with the completion of the work extending to Morgantown; that so much of all acts heretofore passed as have reference to the time of completion of said improvement to the Virginia State line be, and the same are hereby, repealed.

(Approved April 8, 1857. Pamphlet Laws, page 176.)

AN ACT to authorize the issue of bonds by the Monongahela Navigation Company.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same,* That it shall be lawful for the President and Managers of the Monongahela Navigation Company to take up any or all of the bonds of the said company now outstanding, as they respectively mature, by the issue and substitution of other bonds, with the consent of the holders of the said outstanding bonds, on such terms and at such rate of interest, not exceeding eight per cent. per annum, as may be agreed upon between the parties, and to mortgage the whole or any part of their tolls, revenues, or other property, for the security thereof; and it shall be lawful for any trustee, executor, administrator, or guardian, holding any of the said outstanding bonds as an investment of trust funds, to renew and reinvest the same in the bonds authorized by this act.

(Approved February 12, 1862. Pamphlet Laws, page 504.)

A SUPPLEMENT to an act to facilitate the passage of coal and coke boats on the Monongahela Improvement and to incorporate the Marine Transportation Company of Philadelphia, approved the fourteenth day of April, eighteen hundred and fifty-one.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same,* That the penalty provided in the first section of the act to which this is a supplement shall hereafter be, for the first offense, two hundred dollars, and for the second offense, five hundred dollars; and the penalty provided in the second section of said act shall also be, for the first offense, two hundred dollars, and for the second, five hundred dollars; such penalties to be recovered in the manner hereinafter provided, from the owner or owners, or the pilot or other person having charge of the coal or coke boats, by which the provisions of said law may have been broken.

SEC. 2. That the penalties hereinbefore provided for each infraction of the provisions of the first and second sections of the act to which this is a supplement shall be collected as sums of like amount are now collectible, by law, in the court of common pleas, in the county of Allegheny, from the owner or owners of the boats by which the provisions of the first and second sections of said act may have been broken, or from the pilot or other person having charge of such boat or boats; and in all cases of the infraction of said law, at or near the first lock of the said improvement, the penalty so recovered shall go to the guardians of the poor of the city of Pittsburgh,

and in all cases of the infraction of said law at or near any of the other locks of said improvement, the penalty so recovered shall go to the directors of the poor of the county within which such lock is situate; and suits for the recovery of the penalties provided by this act shall be brought in the name of the guardians of the poor of the city of Pittsburgh, or of the directors of the poor of the proper county, as the case may be.

SEC. 3. That the Monongahela Navigation Company may erect and construct, at any or all of the locks of said company, a pier or piers near to the lower end of such lock or locks in the Monongahela River, of such length and width as they may deem advisable, with snubbing posts or rings attached thereto for the anchorage of boats, flats, barges, or other craft navigating said river, and also such pier or piers as they may deem necessary above the locks, for the purposes of mooring or anchoring such boats, flats, barges, or other craft, and facilitating their passage through the locks, and may make and enforce such regulations as to the use of said piers for the purposes aforesaid as they may find expedient and necessary, and charge for the use thereof such rate as the Board of Managers may fix.

SEC. 4. That the Monongahela Navigation Company may construct a chute in any or all of the dams of their improvement for the passage of craft navigating said river, and charge vessels, boats, barges, or other craft, passing over or through such chute or chutes such rate of toll as the Board of Managers may fix, not exceeding fifty per centum above the toll chargeable for similar craft passing through the locks.

SEC. 5. That instead of charging poolage and lockage on coal and coke, as now authorized to do, the Monongahela Navigation Company may hereafter charge such rates of toll on those articles as lockage only as shall not exceed at each lock the total amount heretofore charged as lockage and poolage for that lock and the entire pool above it, and that so much of any act or acts of assembly as may be inconsistent herewith are hereby repealed.

SEC. 6. That in case of the death or resignation of any member of the Board of Managers of said company, the said board may elect any stockholder of said company to fill the vacancy thus occurring until the next annual election.

(Approved May 20, 1864. Pamphlet Laws, page 916.)

AN ACT to provide additional revenue for the use of the Commonwealth.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same,* That the President, Treasurer, Cashier, or other financial officer of every railroad company, steamboat company, canal company, and slackwater navigation company, and all other companies now or hereafter doing business within this State, and upon whose works freight may be transported, whether by such company or by individuals, and whether such company shall receive compensation for transportation, for transportation and toll, or shall receive tolls only, except turnpike companies, plank-road companies, and bridge companies, shall, within thirty days after the first days of January, April, July, and October of every year, make return in writing to the Auditor-General, under oath or affirmation, stating fully and particularly the number of tons of freight carried over, through, or upon the works of said company, for the three months immediately preceding each of the above-mentioned days; and each of said companies, except as aforesaid, shall, at the time of making such return, pay to the State treasurer, for the use of the Commonwealth, on each two thousand pounds of freight so carried, tax at the following rates, viz: First, on the product of mines, quarries, and clay beds, in the condition in which said products may be taken therefrom, two cents. Second, on hewn timber, animal food, including live stock; also on the product of the forest, vegetable, and other agricultural products, the value of which has not been increased by labor, three cents. Third, on all other articles, five cents. Where the same freight shall be carried over and upon different but continuous lines, said freight shall be chargeable with tax as if had been carried but upon one line, and the whole tax shall be paid by such one of said companies as the State treasurer may select and notify thereof. Corporations whose lines of improvement are used by others for the transportation of freight, and whose only earnings arise from the tolls charged for such use, are authorized to add the tax hereby imposed to said tolls and collect the same therewith, but in no case shall tax be twice charged on the same freight carried on or over the same line of improvements: *Provided,* That every company now or hereafter incorporated by this Commonwealth, whose line extends into any other State, and every corporation, company, or individual of any other State holding and enjoying any franchises, property, or privileges whatever in this State by virtue of the laws thereof, shall make returns of freight and pay for the freight carried over, through, and upon that portion of their lines within this State as if the whole of their respective lines were in this State.

(Approved, August 25, 1864. Pamphlet Laws, 988.)

AN ACT to enable railroad, canal, and slackwater navigation com pan ies to straighten, widen, deepen and otherwise improve their lines of railroads, canals, and slackwater navigation, and the bridges aqueducts, piers, and structures thereof.

SECTION 1. *Be it enacted by the Ssenate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same,* That it shall and may be lawful for any railroad, canal, and slackwater navigation company, now or hereafter incorporated by or under any law of this Commonwealth, to straighten, widen, deepen, enlarge, and otherwise improve the whole or portions of their lines of railroads, canals, and slackwater navigation, and the bridges, crossings, sidings, aqueducts, piers, and structures thereof, and make new feeders, whenever, in the opinion of the board of directors of any such company, the same may be necessary for the better securing the safety of persons and property, and increasing the facilities and capacity for the transportation of traffic thereon, and for such purposes to purchase, hold, and use, or enter upon, take, and appropriate land and material: *Provided,* That before any such company shall enter upon or take possession of any such lands and material, they shall make ample compensation to the owner or owners thereof, or parties interested therein, or tender adequate security therefor.

SEC. 2. That where any such company cannot agree with the owner or owners, or parties interested in such land and materials, for the compensation proper for the damage done or likely to be done, or where, by reason of the absence or legal incapacity of any such owner or owners, or parties interested therein, no such compensation can be agreed upon, the same shall be ascertained and paid in the manner provided in the eleventh section of the act regulating railroad companies, approved February nineteen, Anno Domini eighteen hundred and forty-nine.

(Approved March 17, 1869. Pamphlet Laws, page 12.)

AN ACT authorizing corporations to increase their bonded obligations and capital stock.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same,* That it shall and may be lawful for any corporation, created by or existing under the laws of this Commonwealth to increase its bonded obligations and secure the same by mortgage, and also to increase its capital stock from time to time, to any amount not exceeding fifty per cent. of the amounts heretofore authorized, and to sell or dispose of the same on such terms and conditions as to said corporations may seem proper: *Provided, however,* That this act shall not apply to any corporation until it is duly accepted by it, whereupon it shall be taken and deemed to be a part of its act of incorporation, and be made under its authority; and a certificate, duly attested by the president and treasurer of said company, under its corporate seal, setting forth the acceptance of the act, with the amounts and character of the increase, shall be filed in the Auditor General's office of the Commonweath, and a copy thereof be filed with the Secretary of State: *And provided further,* That on all such increase the State shall be entitled, *pro rata,* to the same bonus or tax that is now assessed by law on like amounts of the existing capital of the respective corporations.

(Approved December 29, 1869. Pamphlet Laws; "Appendix, 1869," acts of 1870, page 1374.)

A SUPPLEMENT to the act approved May one, eighteen hundred and sixty-eight, entitled "An act to revise, amend, and consolidate the several acts relating to corporations, brokers, and bankers."

Whereas the Monongahela Navigation Company is prohibited by its charter from transporting freight, and any tax on the transportation of freight on the navigation of said company must be paid by the individuals engaged in such transportation, Therefore,

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same,* That so much of the first section of the act of August twenty-five, Anno Domini eighteen hundred and sixty-four, entitled, "An act to provide additional revenue for the Commonwealth," and of the seventh section of the act of May one, Anno Domini eighteen hundred and sixty-eight, entitled "An act to revise, amend, and consolidate the several laws relating to corporations, brokers, and bankers," as applies to the Monongahela Navigation Company, be, and the same are hereby repealed; and no further proceedings shall be taken to collect any money on account of such tax from said company: *Provided,* That no moneys already paid into the State treasury on account of such tax shall be refunded to said company in consequence of the passage of this act: *And provided also,* That said company shall hereafter be liable to all taxes imposed by the act of May one, eighteen hundred and sixty-eight, upon canal companies, except the tax on tonnage.

(Approved April 1, 1870. Pamphlet Laws, page 738.)

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 113.

LIGHT-STATION KEEPERS.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

A letter from the Light-House Board, recommending appropriations for the erection of structures for the comfort of light station keepers at certain light-houses.

JANUARY 29, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

SIR: I have the honor to transmit herewith a letter of the Light-House Board, of the 14th instant, submitting a list of stations in the first and second light-house districts, at which it states that new structures are urgently needed for the comfort of the light-keepers, the storage and protection of public property, and the greater efficiency of the public service, and requesting, in view of the inadequacy of existing appropriations, that Congress may be asked to make special appropriations for said structures as follows, viz:

Rebuilding keeper's dwelling, Little River, Maine	$3,300
New brick double fog-signal house, Whitehead, Maine	2,970
Two new keepers' dwellings, Sankaty Head, Massachusetts	6,800
Oil-house, Sankaty Head, Massachusetts	500
New keeper's dwelling, Tarpaulin Cove, Massachusetts	3,750
New keeper's dwelling, Ned's Point, Massachusetts	3,750
New keeper's dwelling, Holmes' Hole (West Chop), Massachusetts	3,750
New keeper's dwelling, Wing's Neck, Massachusetts	3,750

I have, accordingly, respectfully to transmit this communication, so that action may be taken by Congress in the matter, if it appears wise to do so, agreeably to the desire of the Light-House Board.

Respectfully yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

TREASURY DEPARTMENT,
OFFICE OF THE LIGHT-HOUSE BOARD,
Washington, January 14, 1887.

SIR: The Light-House Board has the honor to state that at its session held on January 11, 1887, it had under consideration the matter of building certain new structures at stations in the first and second light-house

districts, which are urgently needed for the comfort of the light-keepers, the storage and protection of public property, and the greater efficiency of the public service, when it was ordered that the proper steps be taken to have appropriations made by Congress for these works, the existing appropriations being inadequate therefor, and the Commissioner of Customs having decided that in cases where new dwellings are to be erected there must be special appropriations for the construction thereof.

Recommendation is, therefore, respectfully made that Congress be asked to make the necessary appropriations for the construction or rebuilding of the required new structures, as follows:

For rebuilding the keeper's dwelling at Little River, Maine, the sum of $3,300.

The present dwelling was built in 1847, and has been repaired from time to time. It is now damp and unhealthy, and beyond economical repair. The efficiency of the public service requires that it be rebuilt as soon as practicable.

For building a new brick double fog signal house at Whitehead, Maine, light-station, the sum of $2,970.

There is a duplicate 10-inch steam-whistle at this station, for the accommodation of which the present buildings are entirely inadequate, on account of which the new boiler built for this station has never been put in place. The efficiency of the service requires that new fog-signal structures be erected at this station as soon as practicable.

For building two new keepers' dwellings at Sankaty Head, Massachusetts, light-station, the sum of $6,800.

The present dwellings were erected in 1849, and have been repaired from time to time, but are now in a very poor condition, are badly located, and are very inferior structures. They are beyond economical repair, and the efficiency of the public service requires that new dwellings be erected as soon as practicable.

For building an oil-house at Sankaty Head, Massachusetts, light-station, the sum of $500.

An oil-house is urgently needed at this station for the storage of mineral oil, which is exclusively used for illuminating purposes. It is required not only as a necessary convenience, but also as a safeguard against fire. It would be more economical to build it at the same time the new dwellings are erected.

For building a new keeper's dwelling at Tarpaulin Cove, Massachusetts, light-station, the sum of $3,750.

The present dwelling was built in 1817, and was thoroughly repaired in 1856, since which it has been repaired from time to time. It is now beyond economical repair, and the efficiency of the public service requires that a new dwelling be erected as soon as practicable.

For building a new keeper's dwelling at Ned's Point, Massachusetts, light-station, the sum of $3,750.

The present dwelling was erected in 1847, and was thoroughly repaired in 1856, since which it has been repaired from time to time. It is now in very poor condition, and is entirely beyond economical repair. The efficiency of the public service requires that a new dwelling be erected as soon as practicable.

For building a new keeper's dwelling at Holmes' Hole (West Chop), Massachusetts, light-station, the sum of $3,750.

The present dwelling was erected in 1817, and thoroughly repaired in 1857, since which it has been repaired from time to time. It is now

beyond economical repair, and the efficiency of the public service requires that a new dwelling be erected as soon as practicable.

For building a new keeper's dwelling at Wing's Neck, Massachusetts, light-station, the sum of $3,750.

The present dwelling was built in 1849, since which it has been repaired from time to time, but it is now beyond economical repair. The efficiency of the public service requires that a new dwelling be erected as soon as practicable.

Very respectfully,

S. C. ROWAN,
Vice Admiral, U. S. N., Chairman

The SECRETARY OF THE TREASURY.

O

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. Doc. No. 114.

PAY OF ASSISTANT CUSTODIANS AND JANITORS.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

RECOMMENDING

A reappropriation from unexpended balance for the year 1886 *to meet deficiency in the appropriation for pay of assistant custodians and janitors of certain public buildings for the fiscal year* 1885.

JANUARY 29, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 28, 1887.

SIR: I have the honor to transmit herewith a copy of letter of the chief of division of appointments of the 26th instant, in relation to certain vouchers for services of employés in public buildings for the period from June 14 to June 30, 1885, which remain unpaid on account of the exhaustion of the appropriation for pay of assistant custodians and janitors for that year, amounting to $343.96, and to recommend that provision be made therefor in the deficiency bill by authorizing the transfer of the sum of $343.96 from the unexpended balance of the appropriation for pay of assistant custodians and janitors for the fiscal year 1886 to the same appropriation for the fiscal year 1885.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

TREASURY DEPARTMENT,
OFFICE OF THE SECRETARY,
Washington, D. C., January 26, 1887.

SIR: I have the honor to submit for your consideration the following statement:

The appropriation for "pay of assistant custodians and janitors" for the fiscal year ended June 30, 1885, was exhausted on June 13, 1885. The employés under that appropriation were paid up to June 13 (inclusive) 1885, and the custodians of the respective public buildings were

requested to submit vouchers for services rendered by the employés during the period from June 14 to 30, 1885, to be incorporated in the deficiency bill for 1885.

Notwithstanding this request, the custodians of several public buildings failed to submit the required vouchers, and the claims for services rendered by the hereinafter-named employés consequently could not be incorporated in the deficiency bill for 1885, and they are still unpaid:

Alexandria, Va.:	
William Miller	$23 34
Baltimore, Md.:	
Henry Mehrling	28 07
W. H. Richardson	25 21
Belfast, Me.:	
Fitz W. Gilbert	18 71
Bristol, R. I.:	
William H. Mann	11 23
Charleston, S. C.:	
Oliver Halsey	25 50
William S. Summerson	17 00
D. L. Adams	22 46
New York City:	
George Hillier	93 37
Ann Boyer	17 00
Montgomery, Ala.:	
Joseph Moon	28 07
Paducah, Ky.:	
Joseph Tapscott	34 00
Total	343 96

In order to enable the Department to pay the above claims Congress should be requested to transfer the sum of $343.96 from the unexpended balance of the deficiency appropriation for the fiscal year 1886 to that for 1885, and I respectfully recommend that such authority should be obtained.

Respectfully, yours,

EUGENE HIGGINS,
Chief of Appointment Division.

Hon. DANIEL MANNING,
Secretary of the Treasury.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 115.

FOX AND WISCONSIN RIVER DAMAGES.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

An account of the clerk of the circuit court, Columbia County, Wisconsin, for fees in the Fox and Wisconsin River damage cases.

JANUARY 29, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 28, 1887.

SIR: I have the honor to transmit herewith, for the consideration of Congress, copy of letter of the Attorney-General of the 25th instant, submitting copies of accounts of S. M. Smith, clerk of the circuit court, Columbia County, Wisconsin, for fees in cases of the awards for damages by the improvement of the Fox and Wisconsin Rivers, amounting, with interest, to $91.80.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

DEPARTMENT OF JUSTICE,
Washington, January 25, 1887.

SIR: Inclosed are copies of accounts of S. M. Smith, clerk of the circuit court, Columbia County, Wisconsin, in the Fox and Wisconsin River flowage cases, that the same may be transmitted to Congress for action.

Very respectfully,

A. H. GARLAND,
Attorney-General.

The SECRETARY OF THE TREASURY.

PORTAGE, WIS., *January* 5, 1887.

Hon. RICHARD GUNTHER,
Washington, D. C.:

Inclosed please find several accounts against the United States in my favor. Those cases are on account of the overflow of the Fox River. You probably understand these cases as well or better than I do. You will see by the affidavit that I was

clerk of the court at the time, and have never had my pay. Will you please take the matter in hand and obtain the money for me as soon as possible. Retain your pay for your trouble and forward the balance to me. If anything more is necessary, please inform me.

Very respectfully,

S. M. SMITH.

The United States of America to S. M. Smith, clerk of the circuit court of Columbia County, Wisconsin, for the year A. D. 1877, for clerk fees in the case named below.

State of Wisconsin, circuit court, Columbia County.

JAMES DURICK
v.
THE UNITED STATES.

Award made October 19, 1877	$5 00
Interest on same since date of award, at 7 per cent	3 22
Total amount due in above case	8 22

STATE OF WISCONSIN,
County of Columbia, ss:

I, L. E. Greenleaf, clerk of the circuit court for the county of Columbia, State of Wisconsin, do hereby certify that the foregoing amount of award for clerk's fees in the case of James Durick against the United States was duly ntered and filed in my office on the 19th day of October, A. D. 1877, and now remains on file and of record therein; and that no appeal by either party from said award is now pending.

And that by the laws of the State of Wisconsin the legal rate of interest established by statute on all unpaid debts, demands, and dues is at the rate of 7 per centum per annum.

In testimony whereof I have herennto set my hand and affixed the official seal of said court this —— day of January, A. D. 1887.

[SEAL.]

L. E. GREENLEAF,
Clerk of Circuit Court, Columbia County, Wisconsin.

STATE OF WISCONSIN,
County of Columbia, ss:

Silas M. Smith, being duly sworn, says that the within account is just and true, and that no part thereof has been paid.

SILAS M. SMITH.

Subscribed and sworn to before me this 5th day of January, 1887.

CHAS. L. DUING,
Court Commissioner, Columbia County, Wisconsin.

The United States of America to S. M. Smith, clerk of the circuit court of Columbia County Wisconsin, for the year A. D. 1887, for clerk fees in the case named below, Dr.

State of Wisconsin circuit court, Columbia County.

DENNIS CUSHING
v.
THE UNITED STATES.

Award made April 20, 1887	$5 00
Interest on same since date of award, at 7 per cent	3 39
Total amount due in case at date	8 39

STATE OF WISCONSIN,
County of Columbia, s s:

I, L. E. Greenleaf, clerk of the circuit court for the county of Columbia, State of Wisconsin, do hereby certify that the foregoing amount of award for clerk fees in the case of Dennis Cushing against the United States was duly entered and filed in my office on the 20th day of April, A. D. 1877, and now remains on file and of record therein, and that no appeal by either party from said award is now pending.

And that by the laws of the State of Wisconsin the legal rate of interest established by statute on all unpaid debts, demands, and dues is at the rate of 7 per cent. per annum.

In testimony whereof I have hereunto set my hand and affixed the official seal of said court this —— day of January, A. D. 1887.

[SEAL.]

L. E. GREENLEAF,
Clerk of Circuit Court, Columbia County, Wisconsin.

STATE OF WISCONSIN,
County of Columbia, ss:

Silas M. Smith, being duly sworn, says that the within account is just and true, and that no part thereof has been paid.

SILAS M. SMITH.

Subscribed and sworn to before me this 5th day of January, 1887.

CHAS. L. DUING,
Court Commissioner, Wisconsin.

The United States of America to S. M. Smith, clerk of the circuit court of Columbia County, Wisconsin, for the year A. D. 1877, for clerk fees in the case named below, Dr.

State of Wisconsin, circuit court, Columbia County.

JOHN CUSHING
v.
THE UNITED STATES.

Award made April 20, 1877	$5 00
Interest on same since date of award, at 7 per cent	3 39
Total amount due in case at date	8 39

STATE OF WISCONSIN,
County of Columbia, ss:

I, L. E. Greenleaf, clerk of the circuit court for the county of Columbia, State of Wisconsin, do hereby certify that the foregoing amount of award for clerk fees in the case of John Cushing against The United States was duly entered and filed in my office on the 20th day of April, A. D. 1877, and now remains on file and of record therein, and that no appeal by either party from said award is now pending.

And that by the laws of the State of Wisconsin the legal rate interest established by statute on all unpaid debts, demands, and dues is at the rate of 7 per centum per annum.

In testimony whereof I have hereunto set my hand and affixed the official seal of said court this — day of January, A. D. 1887.

[SEAL.]

L. E. GREENLEAF,
Clerk of Circuit Court, Columbia County, Wisconsin.

STATE OF WISCONSIN,
County of Columbia, ss:

Silas M. Smith, being duly sworn, says that the within account is just and true, and that no part thereof has been paid.

SILAS M. SMITH.

Subscribed and sworn to before me this 5th day of January, 1887.

CHAS. L. DUING,
Court Commissioner, Columbia County, Wisconsin.

The United States of America to S. M. Smith, clerk of the circuit court of Columbia County, Wisconsin, for the year A. D. 1887, for clerk fees in the case named below, Dr.:

State of Wisconsin, circuit court, Columbia County.

WILLIAM GEARY
v.
The UNITED STATES.

Award made April 20, 1887	$5.00
Interest on same since date of award, at 7 per cent	3.39
Total amount due in case at date	8.39

STATE OF WISCONSIN,
County of Columbia, ss:

I, L. E. Greenleaf, clerk of the circuit court for the county of Columbia, State of Wisconsin, do hereby certify that the foregoing amount of award for clerk fees in the case of William Geary against the United States was duly entered and filed in my office on the 20th day of April, A. D. 1877, and now remains on file and of record therein, and that no appeal by either party from said award is now pending.

And that by the laws of the State of Wisconsin the legal rate of interest established by statute on all unpaid debts, demands, and dues is at the rate of 7 per centum per annum.

In testimony whereof I have hereunto set my hand, and affixed the official seal of said court, this — day of January, A. D. 1887.

[SEAL.]

L. E. GREENLEAF,
Clerk of Circuit Court of Columbia County, Wis.

STATE OF WISCONSIN,
County of Columbia, ss:

Silas M. Smith, being duly sworn, says that the within account is just and true and that no part thereof has been paid.

SILAS M. SMITH.

Subscribed and sworn to before me this 5th day of January, 1887.

CHAS. L. DUING,
Court Commissioner, Columbia County, Wisconsin

The United States of America, to S. M. Smith, clerk of the circuit court of Columbia County, Wisconsin, for the year A. D. 1887, for clerk fees in the case named below, Dr.

State of Wisconsin, circuit court, Columbia County.

WILLIAM CUSHING
v.
THE UNITED STATES.

Award made April 20, 1877	$5 00
Interest on same since date of award, at 7 per cent	3 39
Total amount due in case at date	8 39

STATE OF WISCONSIN,
County of Columbia, ss:

I, L. E. Greenleaf, clerk of the circuit court for the county of Columbia, State of Wisconsin, do hereby certify that the foregoing amount of award for clerk fees in the case of William Cushing against the United States was duly entered and filed in my office on the 20th day of April, A. D. 1877, and now remaining on file and of record therein, and that no appeal by either party from said award is now pending.

And that by the laws of the State of Wisconsin the legal rate of interest established by statute on all unpaid debts, demands, and dues is at the rate of 7 per cent. per annum.

In testimony whereof I have hereunto set my hand and affixed the official seal of said court this day of January, A. D. 1887.

[SEAL.]

L. E. GREENLEAF,
Clerk of the Circuit Court Columbia County, Wisconsin.

STATE OF WISCONSIN,
County of Columbia, ss:

Silas M. Smith, being duly sworn, says that the within account is just and true, and that no part thereof has been paid.

SILAS M. SMITH

Subscribed and sworn to before me this 5th day of January, 1887.

CHAS. L. DUING,
Court Commissioner, Columbia County, Wisconsin.

The United States of America to S. M. Smith, clerk of the circuit court of Columbia County, Wisconsin, for the year A. D. 1877, for clerk fees in the case named below.

State of Wisconsin, circuit court, Columbia County.

OLIVER DEMPSEY
v.
THE UNITED STATES.

Award made April 30, A. D. 1877	$5 00
Interest on same since date of award, at 7 per cent	3 40
Total amount due in case at date	8 40

STATE OF WISCONSIN,
County of Columbia, ss:

I, L. E. Greenleaf, clerk of the circuit court for the county of Columbia, State of Wisconsin, do hereby certify that the foregoing amount of award for clerk fees in the case of Oliver Dempsey against the United States was duly entered and filed in my office on the 30th day of April, A. D. 1877, and now remaining on file and of record therein, and that no appeal by either party from said award is now pending.

And that by the laws of the State of Wisconsin the legal rate of interest established by statute on all unpaid debts, demands, and dues is at the rate of 7 per cent. per annum.

In testimony whereof I have hereunto set my hand and affixed the official seal of this court this —— day of January, A. D. 1887.

[SEAL.]

L. E. GREENLEAF,
Clerk of the Circuit Court Columbia County, Wisconsin.

STATE OF WISCONSIN,
County of Columbia, ss:

Silas M. Smith, being duly sworn, says that the within account is just and true, and that no part thereof has been paid.

SILAS M. SMITH.

Subscribed and sworn to before me this 5th day of January, 1887.

CHAS. L. DUING,
Court Commissioner, Calumbia County, Wisconsin.

The United States of America to S. M. Smith, clerk of the circuit court of Columbia County, Wisconsin, for the year A. D. 1877, for clerk fees in the case named below.

STATE OF WISCONSIN,
Columbia County:

CATHERINE CAVANAUGH
v.
THE UNITED STATES.

Award made April 30, 1877	$5 00
Interest on same since date of award, at 7 per cent	3 40
Total amount due in case at date	8 40

STATE OF WISCONSIN,
County of Columbia, ss:

I, L. E. Greenleaf, clerk of the circuit court for the county of Columbia, State of Wisconsin, do hereby certify that the foregoing amount of award for clerk fees in the case of Catherine Cavanaugh against the United States was duly entered and filed in my office on the 30th day of April, A. D. 1877, and now remaining on file and of record thereon, and that no appeal by either party from said award is now pending.

And that by the laws of the State of Wisconsin the legal rate of interest established by statute on all unpaid debts, demands, and dues is at the rate of 7 per cent. per annum.

In testimony whereof I have hereunto set my hand and affixed the official seal of this court, this —— day of January, A. D. 1887.

[SEAL.]

L. E. GREENLEAF,
Clerk of the Circuit Court, Columbia County, Wisconsin.

STATE OF WISCONSIN,
County of Columbia, ss:

Silas M. Smith, being duly sworn, says that the within account is just and true, and that no part thereof has been paid.

SILAS M. SMITH.

Subscribed and sworn to before me this 5th day of January, 1887.

CHAS. L. DUING,
Court Commissioner, Columbia County, Wisconsin.

The United States of America to S. M. Smith, clerk of the circuit court of Columbia County, Wisconsin, for the year A. D. 1877, for clerk fees in the case named below, Dr.

State of Wisconsin, circuit court, Columbia County.

JOHN F. SEYMOUR
v.
THE UNITED STATES.

Award made October 17, 1877	$5 00
Interest on same since date of award, at 7 per cent	3 22
Total amount due in case at date	8 22

STATE OF WISCONSIN,
County of Columbia, ss:

I, L. E. Greenleaf, clerk of the circuit court of Columbia county, State of Wisconsin, do hereby certify that the foregoing amount of award, for clerk fees in the case of John F. Seymour against the United States, was duly entered and filed in my office on the 17th day of October, A. D. 1877, and now remaining on file and of record therein; and that no appeal by either party from said award is now pending.

And that by the laws of the State of Wisconsin the legal rate of interest established by statute on all unpaid debts, demands, and dues is at the rate of 7 per cent. per annum.

In testimony whereof I have hereunto set my hand and affixed the official seal of this court, this —— day of January, A. D. 1887.

[SEAL.]

L. E. GREENLEAF,
Clerk of the Circuit Court, Columbia County, Wisconsin.

STATE OF WISCONSIN,
County of Columbia, ss:

Silas M. Smith, being duly sworn, says that the within account is just and true, and that no part thereof has been paid.

SILAS M. SMITH.

Subscribed and sworn to before me this —— day of January, 1887.

CHAS. L. DUING,
Court Commissioner, Columbia County, Wisconsin.

The United States of America to S. M. Smith, clerk of the circuit court of Columbia County, Wisconsin, for the year A. D. 1877, for clerk fees in the case named below, Dr.

State of Wisconsin, circuit court, Columbia County.

W. M. SINCLAIR
vs.
THE UNITED STATES.

Award made October 18, 1877	$5 00
Interest on same since date of award, at 7 per cent	3 22
Total amount due in case at date	8 22

STATE OF WISCONSIN,
County of Columbia, ss:

I, L. E. Greenleaf, clerk of the circuit court of Columbia County, State of Wisconsin, do hereby certify that the foregoing amount of award for clerk fees in the case of W. M. Sinclair against the United States was duly entered and filed in my office on the 18th day of October, A. D. 1877, and now remaining on file and of record therein; and that no appeal by either party from said award is now pending.

And that by the laws of the State of Wisconsin the legal rate of interest established by statute on all unpaid debts, demands, and dues, is at the rate of 7 per cent. per annum.

In testimony whereof I have hereunto set my hand and affixed the official seal of this court, this —— day of January, A. D. 1887.

[SEAL.] L. E. GREENLEAF,
Clerk of the Circuit Court, Columbia County, Wisconsin.

STATE OF WISCONSIN,
County of Columbia, ss:

Silas M. Smith, being duly sworn, says that the within account is just and true, and that no part thereof has been paid.

SILAS M. SMITH.

Subscribed and sworn to before me this 5th day of January, 1887.

CHAS. L. DUING,
Court Commissioner, Columbia County, Wisconsin.

The United States of America to S. M. Smith, clerk of the circuit court of Columbia County, Wisconsin, for the year A. D. 1877, for clerk fees in the case named below, Dr.

State of Wisconsin, circuit court Columbia County.

JAMES DURICK
v.
THE UNITED STATES.

Award made April 20, 1877	$5 00
Interest on same since date of award, at 7 per cent	3 39
Total amount due in case at date	8 39

STATE OF WISCONSIN,
County of Columbia, ss:

I, L. E. Greenleaf, clerk of the circuit court for the county of Columbia, State of Wisconsin, do hereby certify that the foregoing amounts of award for clerk fees in the case of James Durick against The United States was duly entered and filed in my office on the 20th day April, A. D. 1877, and now remaining on file and of record therein. And that no appeal y either party from said award is now pending.

And that by the laws of the State of Wisconsin the legal rate of interest established by the statute on all unpaid debts, demands, and dues is at the rate of 7 per cent. per annum.

In testimony whereof I have hereunto set my hand and affixed the official seal of this court this —— day of January, A. D. 1887.

[SEAL.] L. E. GREENLEAF,
Clerk of the circuit court, Columbia County, Wisconsin.

STATE OF WISCONSIN,
County of Columbia, ss:

Silas M. Smith, being duly sworn, says that the within account is just and true, and that no part thereof has been paid.

SILAS M. SMITH.

Subscribed and sworn to before me this 5th day of January, 1887.

CHAS. L. DUING,
Court Commissioner, Columbia County, Wisconsin.

The United States of America to S. M. Smith, clerk of the circuit court of Columbia County, Wisconsin, for the year A. D. 1877, for clerk fees in the case named below, Dr.

State of Wisconsin, circuit court, Columbia County.

CHARLES SWEENEY
v.
The UNITED STATES.

Award made April 28, 1877	$5 00
Interest on same since date of award, at 7 per cent	3 40
Total amount due in case at date	8 40

STATE OF WISCONSIN,
County of Columbia, ss:

I, L. E. Greenleaf, clerk of the circuit court for the county of Columbia, State of Wisconsin, do hereby certify that the foregoing amount of award for clerk fees in the case of Charles Sweeney against the United States, was duly entered and filed in my office on the 28th day of April, A. D. 1877, and now remaining on file and of record therein. And that an appeal was taken by the plaintiff from the award of the commissioners in said action and was prosecuted to final judgment, and judgment was entered and filed in my office in favor of said plaintiff and against said defendant on the 15th day of February, 1886, and that by the laws of the State of Wisconsin the legal rate of interest established by statute on all unpaid debts, demands, and dues is at the rate of 7 per cent. per annum.

In testimony whereof I have hereunto set my hand and affixed the official seal of said court, this —— day of January, A. D. 1887.

[SEAL.]

L. E. GREENLEAF,
Clerk of the Circuit Court, Columbia County, Wisconsin.

STATE OF WISCONSIN,
County of Columbia, ss:

Silas M. Smith, being duly sworn, says that the within account is just and true and that no part thereof has been paid.

SILAS M. SMITH.

Subscribed and sworn to before me this 5th day of January, 1887.

CHAS. L. DUING,
Court Commissioner, Columbia County, Wisconsin.

The following is a recapitulation of amounts due in the several cases hereinbefore mentioned:

Amount of award and interest:

No. 1. James Durick *vs.* United States	$8 22
No. 2. Dennis Cushing *vs.* United States	8 39
No. 3. John Cushing *vs.* United States	8 39
No. 4. William Geary *vs.* United States	8 39
No. 5. William Cushing *vs.* United States	8 39
No. 6. Oliver Dempsey *vs.* United States	8 40
No. 7. Catherine Cavanaugh *vs.* United States	8 40
No. 8. John F. Seymour *vs.* United States	8 22
No. 9. W. M. Sinclair *vs.* United States	8 22
No. 10. James Durick *vs.* United States	8 39
No. 11. Charles Sweeney *vs.* United States	8 39
Total amount due	91 80

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 116.

COMMERCE ON SAINT MARY'S FALLS CANAL, 1886.

LETTER

FROM

THE ACTING SECRETARY OF WAR,

TRANSMITTING

A report upon the commerce passing through the Saint Mary's Falls Canal during the year 1886.

JANUARY 29, 1887.—Referred to the Committee on Rivers and Harbors and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 27, 1887.

The Acting Secretary of War has the honor to transmit to the House of Representatives, for the information of the Committee on Rivers and Harbors, a letter of the 24th instant from the Chief of Engineers, and a copy of one from Lieut. Col. O. M. Poe, Corps of Engineers, with accompanying report upon the commerce passing through the Saint Mary's Falls Canal during the season of 1886.

S. V. BENÉT,
Brig. Gen., Chief of Ordnance,
and Acting Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., January 24, 1887.

SIR: I have the honor to submit the within copy of a communication to this office, dated December 29, 1886, from Lieut. Col. O. M. Poe, Corps of Engineers, and accompanying report upon the commerce passing the Saint Mary's Falls Canal during the season of 1886, &c., and, in view of the importance and magnitude of the interests involved, beg to suggest that it be transmitted to the Speaker of the House of Representatives for the information of the Committee on Rivers and Harbors.

Very respectfully, your obedient servant,

J. C. DUANE,
Brig. Gen., Chief of Engineers.

Hon. WM. C. ENDICOTT,
Secretary of War.

REPORTS OF LIEUTENANT-COLONEL O. M. POE, CORPS OF ENGINEERS.

I.

UNITED STATES ENGINEER OFFICE,
Detroit, Mich., December 29, 1886.

SIR: I beg leave to invite special attention to the report of this date upon the commerce of Saint Mary's Falls Canal, and to suggest the propriety of transmitting it to Congress, for use in connection with the question of an appropriation for continuing the enlargement of Saint Mary's Falls Canal, as all the information relating to the commercial statistics in possession of this office is therein tabulated in the most compact form.

I am, sir, very respectfully, your obedient servant,

O. M. POE,
Lt. Col. of Engineers, Bvt. Brig. Gen., U. S. A.

The CHIEF OF ENGINEERS, U. S. A.

II.

UNITED STATES ENGINEER OFFICE,
Detroit, December 29, 1886.

SIR: I have the honor to submit the following report upon the commerce passing the Saint Mary's Falls Canal during the season of 1886, just closed. Statistics for the season are necessarily those of the calendar year.

The canal was open to navigation 224 days, the first vessel having passed on the 25th of April and the last on the 4th of December, thus making the season 13 days longer than in 1885.

On the 15th of July 67 vessels were passed through the locks, this being the greatest number in any one day in the history of the canal.

The average number of vessels passing per day during the month of June was 40; during July, $41\frac{3}{4}$; and during August, $40\frac{2}{3}$, or for the three months a daily average of $40\frac{2}{3}$ vessels. The daily average freight tonnage for the same period was 23,371 tons.

The largest freight tonnage ever passed in one day was on the 28th of July, 1886, when 63 vessels, carrying 43,442 tons, were locked through.

From the following comparative statement (Table. No. 1) it will be seen that the registered tonnage passing the canal during the season was 4,219,397 tons, and the freight tonnage 4,527,759 tons. The ratio of increase over the year 1885 was 39 per cent. in each case.

The increase in freight tonnage over that of 1885 was 1,271,131 tons, of which 67 per cent. was in the single item of iron ore, although there was an increase in every item of freight except silver ore.

The same table shows the approximate value of the freight. The same valuations are used as in the corresponding statement for 1885, which, for convenience of reference, is repeated. The aggregate for 1886 is $69,080,071.95, being an increase of 29 per cent. over the aggregate value of 1885.

For convenient reference Table No. 2 has been prepared, to show the business of the canal from the beginning, and constitutes a most interesting exhibit. The growth of the commerce of the Lake Superior region, and through it that of the great Northwest, is very readily traced, not only in quantity, but in the items composing the aggregate.

I am, sir, very respectfully, your obedient servant,

O. M. POE,
Lt. Col. of Engineers, Bvt. Brig. Gen., U. S. A.

The CHIEF OF ENGINEERS, U. S. A.

No. 1.—*Comparative statement of the amount and value of the commerce through Saint Mary's Falls Canal, Michigan, for the calendar years* 1885 *and* 1886.

Items.	Quantity.		Increase.		Decrease.		Price per unit.	Total valuation.	
	1885.	1886.	Amount.	Per cent.	Amount.	Per cent.		1885.	1886.
Vessels ..... number..	5,380	7,424	2,044	38	.....	.....	.....	.....	.....
Lockages ..... do....	2,863	3,593	730	25	.....	.....	.....	.....	.....
Tonnage ..... registered..	3,035,937	4,219,397	1,183,460	39	.....	.....	.....	.....	.....
Do ..... freight..	3,256,628	4,527,759	1,271,131	39	.....	.....	.....	.....	.....
Passengers ..... number..	36,147	27,088	.....	.....	9,059	25	.....	.....	.....
Coal ..... net tons..	894,991	1,009,999	115,008	13	.....	.....	$3 50	$3,132,468 50	$3,534,996 50
Flour ..... barrels..	1,440,093	1,759,365	319,272	22	.....	.....	5 00	7,200,465 00	8,796,825 00
Grain ..... bushels..	15,697,194	19,706,858	4,009,664	26	.....	.....	98	15,383,250 12	19,312,720 84
Manufactured iron ..... net tons..	60,842	115,208	54,366	89	.....	.....	50 00	2,576,750 00	5,366,950 00
Pig-iron ..... do ..					.....	.....	17 00	158,219 00	133,773 00
Salt ..... barrels..	136,355	158,677	22,322	16	.....	.....	1 00	136,355 00	158,677 00
Copper ..... net tons..	31,927	38,627	6,700	21	.....	.....	200 00	6,385,400 00	7,725,400 00
Iron ore ..... do....	1,235,122	2,087,809	852,687	69	.....	.....	3 50	4,392,927 00	7,307,331 50
Lumber ..... feet, board measure..	127,984,000	138,688,000	10,704,000	8	.....	.....	18 00	2,303,712 00	2,496,384 00
Silver ore ..... net tons..	3,669	2,009	.....	.....	1,660	45	153 79	564,255 51	308,964 11
Building-stone ..... do....	8,189	9,449	1,260	15	.....	.....	10 00	81,890 00	94,490 00
Unclassified freight ..... do....	184,963	230,726	45,763	25	.....	.....	60 00	11,097,780 00	13,843,560 00
Total	.....	.....	.....	.....	.....	.....	.....	53,413,472 13	69,080,071 95

Canal was open to navigation 211 days in 1885.
Canal was open to navigation 224 days in 1886.

No. 2.—*Statement of the commerce through Saint Mary's Falls Canal for each calendar year from its opening in* 1855.

Year.	Sailing vessels.	Steamers.	Unregistered craft.	Total passages.	Total lockages.	Tonnage.		Passengers.	Coal.	Flour.	Wheat.	Grain, other than wheat.	Manufactured and pig iron.	Salt.	Copper.	Iron ore.	Lumber, M ft., B. M.	Silver ore and bullion.	Building stone.	Date of opening.	Date of closing.
						Registered.	Actual freight.														
									Tons.	*Barrels.*	*Bushels.*	*Bushels.*	*Tons.*	*Bbls.*	*Tons.*	*Tons.*		*Tons*	*Tons*		
1855.	(a)	(a)	(b)	(a)	(c)	106,296	(d)	4,270	1,414	10,289	(e)	.....	1,040	587	3,196	1,447	126	(f)	(e)	June 18	Nov. 23
1856.	(a)	(a)	(b)	(a)	(c)	101,458	(d)	4,674	3,968	17,686	(e)	33,908	781	464	5,727	11,597	395	(f)	(e)	May 4	Nov. 28
1857.	(a)	(a)	(b)	(a)	(c)	180,820	(d)	6,650	5,278	16,560	(e)	22,300	1,325	1,500	5,760	26,184	572	(f)	(e)	May 9	Nov. 30
1858.	(a)	(a)	(b)	(a)	(c)	219,819	(d)	9,230	4,118	13,782	(e)	10,500	2,597	950	6,744	31,035	185	(f)	(e)	Apr. 18	Nov. 20
1859.	(a)	(a)	(b)	(a)	(c)	352,642	(d)	.....	8,884	39,459	(e)	71,738	5,504	2,737	7,247	65,769	.....	(f)	(e)	May 3	Nov. 28
1860.	(a)	(a)	(b)	(a)	(c)	403,657	(d)	.....	.....	50,250	(e)	133,437	.....	.....	9,000	120,000	.....	(f)	(e)	May 11	Nov. 26
1861.	(a)	(a)	(b)	(a)	(c)	276,639	(d)	8,816	11,507	22,743	(e)	76,830	4,194	3,014	7,645	44,836	394	(f)	(e)	May 3	Nov. 14
1862.	(a)	(a)	(b)	(a)	(c)	359,612	(d)	8,468	11,346	17,291	(e)	59,062	6,438	2,477	6,881	113,014	196	(f)	(e)	Apr. 27	Nov. 27
1863.	(a)	(a)	(b)	(a)	(c)	507,434	(d)	18,281	7,805	31,975	(e)	78,480	6,681	1,506	1,044	181,567	1,411	(f)	(e)	Apr. 28	Nov. 24
1864.	1,045	366	(b)	1,411	(c)	571,438	(d)	16,985	11,282	33,937	(e)	143,560	7,643	1,776	5,331	213,753	2,001	(f)	(e)	May 2	Dec. 4
1865.	602	395	(b)	997	(c)	409,062	(d)	19,777	.....	34,985	(e)	.....	7,346	3,175	9,935	147,459	822	(f)	(e)	May 1	Dec. 3
1866.	555	453	(b)	1,008	(c)	458,530	(d)	14,067	19,915	33,603	(e)	229,926	13,235	4,454	9,550	152,102	144	(f)	(e)	May 5	Dec. 3
1867.	839	466	(b)	1,305	(c)	556,899	(d)	15,120	22,927	28,345	(e)	249,031	20,602	5,316	10,585	222,861	390	(f)	(e)	May 4	Dec. 3
1868.	817	338	(b)	1,155	(c)	432,563	(d)	10,590	25,814	27,372	(e)	285,123	22,785	4,624	12,222	191,939	1,119	(f)	(e)	May 2	Dec. 3
1869.	939	399	(b)	1,338	(c)	524,885	(d)	17,657	27,850	32,007	(e)	323,501	23,851	5,910	18,662	239,368	1,260	(f)	(e)	May 4	Nov. 29
1870.	1,397	431	(b)	1,828	(c)	690,826	(d)	17,153	15,952	33,548	49,700	304,077	42,959	11,089	11,301	409,850	722	92	2,917	Apr. 29	Dec. 1
1871.	1,064	573	(b)	1,637	(c)	752,101	(d)	15,859	46,798	26,060	1,376,705	308,823	54,984	36,199	14,562	327,461	1,072	464	5,228	May 8	Nov. 29
1872.	1,212	792	(b)	2,004	(c)	914,735	(d)	25,830	80,815	136,411	567,134	445,774	86,194	42,690	14,591	383,105	1,744	306	5,213	May 11	Nov. 26
1873.	1,549	968	(b)	2,517	(c)	1,204,446	(d)	30,966	96,780	172,692	2,119,997	309,645	44,920	29,335	15,927	504,121	1,162	580	2,218	May 5	Nov. 18
1874.	832	901	(b)	1,734	(c)	1,070,857	(d)	22,958	61,123	179,855	1,120,015	149,999	31,741	42,231	15,346	427,658	638	443	401	May 12	Dec. 2
1785.	569	1,464	(b)	2,033	(c)	1,259,534	(d)	19,685	101,260	309,991	1,213,788	250,080	54,381	43,989	18,396	493,408	5,391	847	2,978	May 12	Dec. 2
1876.	684	1,733	(b)	2,417	(c)	1,541,676	(d)	30,286	124,734	315,224	1,971,549	407,772	64,091	46,666	25,756	609,752	17,761	985	2,102	May 8	Nov. 26
1877.	1,401	1,050	(b)	2,451	(c)	1,439,216	(d)	21,800	91,575	355,117	1,349,738	343,542	39,971	63,188	16,767	568,082	4,143	987	2,506	May 2	Nov. 30
1878.	1,091	1,476	(b)	2,567	(c)	1,667,136	(d)	20,394	91,856	344,599	1,872,940	264,674	14,882	63,520	22,529	555,750	24,119	650	2,754	Apr. 8	Dec. 3
1879.	1,403	1,618	100	3,121	(c)	1,677,071	(d)	18,979	110,704	451,000	2,603,666	951,496	39,218	92,245	22,309	540,075	35,598	324	2,226	May 2	Dec. 3
1880.	1,718	1,735	50	3,503	(c)	1,734,890	(d)	25,766	170,501	523,860	2,105,920	2,547,106	46,791	77,916	21,753	677,073	44,539	66	2,283	Apr. 28	Nov. 15
1881.	1,706	2,117	181	4,004	2,120	2,092,757	1,567,741	24,671	295,647	605,453	3,456,965	367,838	87,830	65,897	29,488	748,131	58,877	.....	1,400	May 7	Dec. 5
1882.	1,663	2,739	372	4,774	2,572	2,468,088	2,029,521	29,256	430,184	344,044	3,728,856	473,129	92,870	176,612	25,409	987,060	82,783	22	5,428	Apr. 21	Dec. 3
1883.	1,458	2,620	237	4,315	2,351	2,042,259	2,267,105	39,130	714,444	687,031	5,900,473	776,552	109,910	70,898	31,024	791,732	87,131	814	2,405	May 2	Dec. 11
1884.	1,709	3,609	371	5,689	3,074	2,997,837	2,874,557	54,214	706,379	1,248,243	11,985,791	517,103	72,428	144,804	36,062	1,136,071	122,389	9,731	6,047	Apr. 23	Dec. 10
1885.	1,689	3,354	337	5,380	2,863	3,035,937	3,256,628	36,147	894,991	1,440,093	15,274,213	422,981	60,842	136,355	31,927	1,235,132	127,981	3,669	8,189	May 6	Dec. 2
1886.	2,534	4,584	306	7,424	3,593	4,219,397	4,527,759	27,088	1,009,999	1,759,365	18,991,485	715,373	115,208	158,677	38,627	2,087,809	138,688	2,009	9,449	Apr. 25	Dec. 4

a No record kept until 1864.
b No record kept until 1879.
c No record was kept until the United States assumed control of canal in 1881.
d No record was kept until the United States assumed control of the canal in June, 1881.
e None shipped from Lake Superior until 1870.
f None shipped from Lake Superior until 1867.

O

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 117.

SEA-OTTER HUNTING AND SEAL FISHERIES.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

SUBMITTING

A deficiency estimate of an appropriation for the protection of the sea-otter hunting grounds and the seal fisheries, and for enforcing laws in Alaska.

JANUARY 29, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT,
OFFICE OF THE SECRETARY,
Washington, D. C., January 28, 1887.

SIR: I have the honor to submit the accompanying estimate of deficiency in the appropriation for the protection of the sea-otter hunting grounds and seal fisheries, and the enforcement of the provisions of law, in Alaska, for the year ending June 30, 1887.

Last year it was found necessary to send two revenue cutters on this service to Alaska, and accordingly the revenue-marine steamer Bear, which had been provided by Congress for that purpose, was dispatched from San Francisco about May 1, and this vessel was followed about June 1, by the revenue-marine steamer Corwin, which had previously been the only revenue vessel sent on this service. Both vessels were furnished at the time of their departure with outfits for cruising up to the end of the open season of 1886.

The expenses of these cruises were as follows:

Paid from appropriation, 1886:		
Revenue-marine steamer Bear, outfits and pay-roll for May and June	$16,288 61	
Revenue-marine steamer Corwin, outfits and pay-roll for June	5,309 95	
		21,598 56
Paid from appropriation, 1887:		
Revenue-marine steamer Bear, pay-roll for July, August, September, and October	10,825 85	
Same vessel, November and December, out of commission	1,656 70	
Revenue-marine steamer Corwin, pay-roll for July, August, and September	6,866 78	
		19,259 33

The above sum of $19,359.33, expended since July 1, 1886, has about exhausted the appropriation of $20,000 made at the last session of Congress, leaving the expenditure which it is believed the interests of the Government require to be made, to send two suitable vessels to Alaska

next May and June, unprovided for. This expenditure is estimated at $20,335.07, the cost of the same work having been $21,598.56 during the corresponding months of 1886, as before stated.

Evidence has been already presented and published in the report on the sundry civil bill No. 3477 of the present session of the House of Representatives, which shows the amount necessary for the proper maintenance of the Revenue-Marine Service—that is, the revenue cutter and the Alaska service—to be $915,000 per annum, for which, in 1887, there has been appropriated but $895,000, as follows:

1887.	Revenue-cutter service	$875,000 00
1887.	Alaska service	20,000 00
		895,000 00

This makes it necessary to ask for an additional amount to be appropriated for the Alaska service in order that the operations of the Revenue-Marine Service may not be injuriously restrained.

I would, therefore, request that the amount of the deficiency required for the protection of the sea-otter hunting grounds and seal fisheries, and the enforcement of provisions of law in Alaska, stated in the estimate herewith submitted at $23,000, be appropriated at the present session of Congress.

Respectfully, yours,

D. MANNING.
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

Estimate of deficiency appropriation required for the service of the fiscal year ending June 30, 1887.

MISCELLANEOUS EXPENSES, TREASURY DEPARTMENT.

Detailed objects of expenditure, and explanations.		Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1887.
Protection of sea-otter hunting grounds and seal fisheries in Alaska, 1887.			
To enable the Secretary of the Treasury to use revenue steamers for the protection of the interests of the Government on the seal islands and the sea-otter hunting grounds, and the enforcement of the provisions of law in Alaska:			
During six months from July 1, 1886, to January 1, 1887, the expenditures on account of which this appropriation was made, were as follows:			
Pay-rolls of revenue-marine steamer Bear from July 1 to November 1, 1886	$10,825 85		
Expenses of same vessel for November and December, 1886, out of commission	1,656 70		
Pay-rolls of revenue-marine steamer Corwin from July 1 to October 1, 1886	6,866 78		
	19,349 33		
Further expenditures will be necessary before the end of the fiscal year 1877, as follows:			
Expenses of the Bear, out of commission, from January 1 to May 1, 1887	3,315 60		
Pay-rolls for May and June, 1887, and repairs and outfits for a six months' cruise in Alaska, for the steamer Bear and another revenue cutter, estimated*	20,335 07		
Amount required for fiscal year 1887	43,000 00		
Amount appropriated for fiscal year 1887 (act August 4, 1886, vol. 24, p. 237, sec. 1)	20,000 00		
Additional amount required	23,000 00	$23,000 00	$20,000 00

*The amount that was expended for the pay-rolls and outfits of the steamers Bear and Corwin, during the corresponding months of 1866, was $21,598.56 for Alaska service.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. DOC. No. 118.

RECORDS OF UNITED STATES COURTS.

LETTER

FROM

THE ATTORNEY-GENERAL,

RECOMMENDING

That an appropriation be made for arranging and filing the records and files of United States courts.

JANUARY 29, 1887.—Committed to the Committee on Appropriations and ordered to be printed.

DEPARTMENT OF JUSTICE,
Washington, January 27, 1887.

SIR: The attention of the House Committee on Appropriations is directed to the annual report of the Attorney-General for the year 1886, page 17, second paragraph, "records of the United States courts," and to the recommendation therein made, that an appropriation be made for the purpose of arranging, filing, and placing in order the records and files of courts, the accumulation of years, that were thrown into disorder and cast into heaps in store-rooms in such confusion, that to all intents and purposes their availability as evidence in United States cases or in private interests is practically valueless.

The quotation made on page 17 from a report of an examiner respecting the records of the United States courts in the eastern district of Virginia from the date of the establishment of the courts down to the year 1860 applies to several other courts, and the matter is presented to the attention of the Appropriations Committee as a proper subject for its action.

Very respectfully,

A. H. GARLAND,
Attorney-General.

Hon. JOHN G. CARLISLE,
Speaker House of Representatives.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 119.

SIGNAL SERVICE DEFICIENCIES.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

Estimates from the Secretary of War of deficiencies in appropriations for the Signal Service for the current fiscal year, in lieu of estimates submitted December 17, 1886.

FEBRUARY 1, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 31, 1887.

SIR: I have the honor to transmit herewith, for the consideration of Congress, copy of letter of the Secretary of War of the 29th instant, submitting estimates of deficiencies in appropriations for the Signal Service for the current fiscal year, in lieu of those submitted December 17, 1886, and printed as House Ex. Doc. No. 45, present session.

Respectfully yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

WAR DEPARTMENT,
Washington City, January 29, 1887.

SIR: I have the honor to forward herewith, for transmission to Conress, copy of a letter from the acting Chief Signal Officer, submitting estimates of deficiencies in appropriations for the Signal Service for the present fiscal year. These estimates are designed to take the place of those printed in House Ex. Doc. No. 45, Forty-ninth Congress, second session.

Very respectfully,

WM. C. ENDICOTT,
Secretary of War.

The SECRETARY OF THE TREASURY.

SIGNAL OFFICE, WAR DEPARTMENT,
Washington City, January 22, 1887.

SIR: I have the honor to say that, since the estimates for deficiencies were submitted, as per Executive Document No. 45, House of Representatives, Forty-ninth Congress, second session, I have gone over the matter most carefully, and am impelled by the result of my examination to request that the necessary action may be taken to have certain of the amounts increased, as follows:

Signal Service pay:

For mileage to officers when traveling on duty under orders, being for the service of the fiscal year ending June 30, 1887 (appropriated 24 Stat. at L., p. 247, sec. 1).

[NOTE.—In the system of stations of this Service, where the offices are in nearly every large city of the United States and at great distances from the central office, it becomes necessary to have such offices inspected by officers at least once each year for the comparison of instruments with standards. These inspections also result in correcting many evils which constantly grow up and imperil the efficiency of the Service. The amount ($4,000) appropriated for mileage for the present fiscal year is not sufficient to carry out the customary plan, as Congress cut down by $1,000 the amount estimated and given for former years. The amount now asked is merely to enable the inspections to be completed according to the established plan and custom.]

One reason why mileage is needed is in fact that there are fifty-one stations which have not been inspected within the past twelve months, and twenty-five others which will have been unvisited over a year by July 1 next.

The above item should be increased from $1,000 to $2,000.

Signal Service transportation:

Transportation of men and their baggage, and for purchase of a horse for mounted messenger, being for the service of the fiscal year ending June 30, 1887 (appropriated 24 Stat. at L., p. 248, sec. 1).

[NOTE.—On account of decreased appropriations for this purpose for this year (by $2,875) there is not remaining sufficient funds to transport the men of the Signal Service so as to give an efficient service. These men have to be discharged each five years, causing in every month journeys to a place where there is a military officer to re-enlist them, or, in case they do not re-enlist, then journeys of other men to take their places. Sickness and casualties require journeys, as well as every new enlistment at this office.]

On assuming charge of the Bureau at the beginning of December, 1886, only $250 remained out of the appropriation for transportation for the current fiscal year. That this office is not disposed to spend this appropriation improperly, is evidenced by the fact that $2,282.68 for the previous fiscal year were covered back into the Treasury.

In the present condition of the Service it is impossible to move a man, even to discharge or re-enlist him or to replace those who are dead or dangerously ill. These emergencies are not imaginary, but several such have actually occurred. The unfortunate causes which required so great an expenditure in the early part of the present fiscal year are several:

First. The fact that some $766.50 worth of requests, issued before June 30, 1886, could not be paid from the appropriation of that year, although over $2,000 was then on hand, but had to be paid from the present appropriation, as the journeys were completed after July 1, 1886.

Second. The extraordinary expenses arising from the Indian war in Arizona entailed an expense of over $1,000 upon this service, in moving the signal men into Arizona, and in changing their stations during and after the campaign, when their services were no longer required.

Third. The abandonment of Fort Myer necessitated the sending to various stations the educated and trained observers at that point, thus involving the office in an expense which could not be foreseen.

Fourth. The fact that the estimates for this year, although carefully made up, were reduced $2,875.

The item for transportation of men, including their baggage, should be increased to $2,325.

The sum requested for barracks and quarters is inadequate, as the following statement will show:

Expended during six months ending December 31, 1886	$44,104 37
Required for six months ending June 30, 1887	44,652 00
Total	88,756 37
Amount appropriated	84,009 17
Deficiency	4,747 20

The deficiency required should, therefore, be increased to $4,747.20. The cause of this deficiency is, that the law provides for 470 men; the Secretary of War fixes the rate and Congress appropriates an amount insufficient to meet the requirements of the Service for the number of men at the rates fixed by the Secretary of War, and unless the amount is now appropriated the men will suffer great hardship in being deprived of their allowance, and besides, Congress will at some future day have to appropriate the amount, as it is a just claim against the Government.

The amount estimated for commutation of fuel is not sufficient, as will be seen from the statement under:

Expended during six months ending December 31, 1886	$23,477 15
Required for six months ending June 30, 1887	24,084 00
Total	47,561 15
Amount appropriated	45,000 00
Deficiency	2,561 15

The amount originally asked should, therefore, be increased to $2,561.15, and for the same reasons as set forth under the item for barracks and quarters above.

The other items in Executive Document No. 45 are all urgently needed, and unless appropriated the Service will be compelled to discontinue certain of its stations before the close of the fiscal year.

I am, very respectfully, your obedient servant,

A. W. GREELY,
Captain Fifth Cav., A. S. O., and
Ass't Acting Chief Signal Officer, U. S. A.

The SECRETARY OF WAR.

Estimates of deficiency appropriations required for the service of the fiscal year ending June 30, 1887, by the Chief Signal Officer of the Army.

Detailed objects of expenditure, and explanations.	Estimated amount which will be required for each detailed object of expenditure.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1887.
Signal Service—Pay—			
For mileage to officers when traveling on duty under orders, being for the service of the fiscal year ending June 30, 1887 (appropriated, vol. 24, p. 247, sec. 1)	.....	$2,000 00	$225,391 50
NOTE.—In the system of stations of this service, where the offices are in nearly every large city of the United States, and at great distances from the central office, it becomes necessary to have such offices inspected by officers at least once each year for the comparison of instruments with standards. These inspections also result in correcting many evils which constantly grow up and imperil the efficiency of the service. The amount ($4,000) appropriated for mileage for the present fiscal year is not sufficient to carry out the customary plan, as Congress cut down by $1,000 the amount estimated and given for former years. The amount now asked is merely to enable the inspections to be completed according to the established plan and custom.			
One reason why mileage is needed is the fact that there are 51 stations which have not been inspected within the past twelve months, and 25 others which will have been unvisited over a year by July 1 next.			
Signal Service—Transportation—			
Transportation of men and their baggage and for purchase of a horse for mounted messenger, being for the service of the fiscal year ending June 30, 1887. (Appropriated, vol. 24, p. 248, sec. 1)	.....	2,325 00	21,300 00
NOTE.—On account of decreased appropriations for this purpose for this year (by $2,875) there is not remaining sufficient funds to transport the men of the Signal Service so as to give an efficient service. These men have to be discharged each five years, causing in every month journeys to a place where there is a military officer to re-enlist them, or in case they do not re-enlist, then journeys of other men to take their places. Sickness and casualties require journeys, as well as every new enlistment at this office. On assuming charge of the bureau at the beginning of December, 1886, only $250 remained out of the appropriation for transportation for the current fiscal year. That this office is not disposed to spend this appropriation improperly is evidenced by the fact that $2,282.68 for the previous fiscal year were covered back into the Treasury.			
In the present condition of the service, it is impossible to move a man, even to discharge or re-enlist him, or to replace those who are dead or dangerously ill. These emergencies are not imaginary, but several such have actually occurred. The unfortunate causes which required so great an expenditure in the early part of the present fiscal year are several:			
First. The fact that some $766.50 worth of requests, issued before June 30, 1886, could not be paid from the appropriation of that year, although over two thousand dollars were then on hand, but had to be paid from the present appropriation, as the journeys were completed after July 1, 1886.			
Second. The extraordinary expenses arising from the Indian war in Arizona, entailed an expense of over $1,000 upon this service, in moving the Signal men into Arizona, and in changing their stations during and after the campaign, when their services were no longer required.			
Third. The abandonment of Fort Myer necessitated the sending to various stations the educated and trained observers at that point, thus involving the office in an expense which could not be foreseen.			
Fourth. The fact that estimates for this year, although carefully made up, were reduced $2,875.			
The horse in use has been in service six or more years, and has lately so failed as to be dangerous to his rider. Several men have been more or less injured by the horse falling, and he should be replaced before some serious or fatal accident occurs.			

Estimates of deficiency appropriations for the Chief Signal Officer—Continued.

Detailed objects of expenditure, and explanations.	Estimated amount which will be required for each detailed object of expenditure.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1887.
Observations and report of storms—			
For telegraphing reports, messages, and other information in connection with the observation and report of storms, being for the service of the fiscal year ending June 30, 1887. (Appropriated, vol. 24, p. 246, sec. 1)	$18,000 00		
NOTE. -For the fiscal year ending June 30, 1886, the sum of $138,000 was appropriated, but for the fiscal year ending June 30, 1887, only $120,000 was appropriated, which sum is not sufficient to properly and efficiently administer the telegraphic service. During the four months ending October 31, 1886, the sum of $46,274.52 has been incurred for telegraphing reports, messages, and other information. This short appropriation arose by Congress adopting the expenditure of the first part of the preceding fiscal year as a basis, which was too small by $18,000. Since the whole plan of cold-wave warnings and other useful and necessary work was adopted during the last half of the same year, this does not increase previous appropriations. The estimate was calculated upon the service in the past year, and unless the sum of $18,000 is given, the telegraphing of the reports at very many of the important stations will have to be discontinued. So far as the amount appropriated for telegraphing is concerned, that portion which comes from subsidized roads, and which is settled in the Treasury, is included in this estimate. The amount covers the total cost of telegraphing for which this service pays, and that portion of the amount which is due to the telegraph companies on account of messages sent over subsidized roads.			
For rent, hire of civilian employés, furniture, light, stationery, ice, repairs, rent of telephones, text-books, lumber, and other expenses of offices maintained as stations of observation in cities or places outside of Washington, D. C., being for the service of the fiscal year ending June 30, 1887. (Appropriated. Vol. 24, p. 246, sec. 1)	5,000 00		
NOTE.—The amount required is made up as follows:			
Civilian assistants and observers	$2,000		
Furniture	1,000		
Heating supplies	500		
Stationery	500		
Lights	500		
Incidentals	500		
The amount estimated for the fiscal year ending June 30, 1887, was $51,500; the amount appropriated was $35,000, which, with the utmost economy, will not be sufficient for the actual needs of the service. The furniture at nearly all the stations is worn and broken and entirely worthless, having been of a very cheap class when purchased, and in service at many places for the past ten years.			
For river and flood observations and expenses incidental thereto, being for the service of the fiscal year ending June 30. 1887. (Appropriated. Vol. 24, p. 246, sec. 1)	500 00		
NOTE.—The amount now on hand for these observations is $5,579. Deducting the regular pay of observers ($4,355.75), there will remain the sum of $1,223.25 to pay for extra observations during the remainder of the fiscal year. The amount appropriated for the service of the fiscal year is $1,000 less than was appropriated for the fiscal year ending June 30, 1886.			
For observations and expenses incidental thereto, announcing the probable approach and severity of frosts or rains for the benefit of the cotton region of the United States, being for the service of the fiscal year ending June 30, 1887. (Appropriated. Vol. 24, p. 247, sec. 1)	270 25		
		$23,770 25	$264,350 00
NOTE.—Under this appropriation there remained on hand October 31, 1886, the sum of $3,406.70; the estimated cost of this service for the remainder of this fiscal year will be $3,676.95, leaving a deficiency of $270.25.			

Estimates of deficiency appropriations for the Chief Signal Officer—Continued.

Detailed objects of expenditure, and explanations.	Estimated amount which will be required for each detailed object of expenditure.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year ending June 30, 1887.
Maintenance and repair of military telegraph lines—			
For maintenance and repair of military telegraph lines, including rent of offices, salaries of civilian operators and repair-men, lights, supplies, general repairs, being for the service of the fiscal year ending June 30, 1887. (Appropriated, vol. 24, p. 241, sec. 1)	.....	$5,000 00	$24,000 00
NOTE.—This amount is for the purchase and laying of a new submarine cable across the mouth of the Columbia River. The present cable being part of the military telegraph line between Astoria, Oreg., and Fort Canby, Wash., failed on July 31, 1886, and is supposed to have been broken by a ship's anchor. Two attempts were made to recover and repair this cable, but being heavily sanded could not be raised. The line is an important one to military, shipping, and meteorological interests, and should be re-established at the earliest possible date.			
Signal Service—Regular supplies—			
For fuel for various offices on the United States military telegraph lines and at stations of observations outside of Washington, D. C., and for sale of the regulation allowance to officers of the Signal Corps, being for the service of the fiscal year ending June 30, 1887. (Appropriated, vol. 24, p. 247, sec. 1.)	$970 68		
NOTE.—The amount appropriated for the fiscal year ending June 30, 1887, was $6,000; the amount of contracts made and to be made aggregates $6,270.68; the amount of $270.68 is therefore needed to supply stations to the close of the fiscal year. In addition the sum of $700 is needed to reimburse officers for amounts paid by them, for an allowance of which by law the Government should pay a proportionate part.			
For commutation of fuel for not exceeding four hundred and seventy men of the Signal Corps on duty at the office of the Chief Signal Officer, and at signal stations throughout the United States, being for the service of the fiscal year ending June 30, 1887 (appropriated, Vol. 24, p. 247, sec. 1).	2,561 15		
NOTE.—This estimate is for the difference between commutation of fuel at $8 per month, and commutation of fuel at $9 per month, due enlisted men of the Signal Corps, who have been paid at the rate of $8 per month, while serving at points where the rate as fixed by the honorable Secretary of War is $9 per month.		3,531 83	54,538 37
Expended during six months ending December 31, 1886 ..... $23,477 15			
Required for six months ending June 30, 1887 ..... 24,084 00			
Total 47,561 15			
Amount appropriated 45,000 00			
Deficiency 2,561 15			
The cause of this deficiency is that the law provides for 470 men; the Secretary of War fixes the rate, and Congress appropriates an amount insufficient to meet the requirements of the service for the number of men at the rates fixed by the Secretary of War, and unless the amount is now appropriated the men will suffer great hardship in being deprived of their allowance, and, besides, Congress will at some future day have to appropriate the amount, as it is a just claim against the Government.			
Signal Service—Barracks and quarters—			
For commutation of quarters to not exceeding four hundred and seventy enlisted men of the Signal Corps on duty at the Office of the Chief Signal Officer and at signal stations throughout the United States, being for the service of the fiscal year ending June 30, 1887. (Appropriated, vol. 24, p. 248, sec. 1)	.....	4,747 20	84,009 17
NOTE.—This estimate is for the difference between commutation of quarters at $10 per month and commutation of quarters at $21 per month, due enlisted men of the Signal			

Estimates of deficiency appropriations for the Chief Signal Officer—Continued.

Detailed objects of expenditure, and explanations.	Estimated amount which will be required for each detailed object of expenditure.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the curren fiscal year ending June 30, 1887.
Signal Service—Barracks and quarters—Continued.			
Corps who have been paid at the rate of $10 per month while serving at points where the rate, as fixed by the honorable Secretary of War, is $21 per month.			
Expended during six months ending December 31, 1886	$44,104 37		
Required for six months ending June 30, 1887	44,652 00		
Total	88,756 37		
Amount appropriated	84,009 17		
Deficiency	4,747 20		
The cause of this deficiency is similar to that advanced under the item for commutation of fuel.			
Signal Service—Medical department—			
For medical attendance and medicines for officers and enlisted men of the Signal Corps, being for the service of the fiscal year ending June 30, 1887. (Appropriated, vol. 24, p. 248, sec. 1	.....	$1,000 00	$2,000 00
NOTE.—The amount disbursed from July 1, 1886, to November 1, 1886, was $836.60. The amount disbursed from November 1, 1885, to June 30, 1886, was $1,755.90. Total disbursed in twelve months, $2,592.50, to which should be added probable cost of medicines furnished from Army dispensaries not included in the above, $407.50. The amount appropriated for the fiscal year ending June 30, 1887, was $2,000, showing a possible deficiency of $1,000.			
Total Signal Service	.....	42,374 28	675,589 04

49TH CONGRESS, 2d Session. | HOUSE OF REPRESENTATIVES. | Ex. DOC. No. 120.

JUDGMENTS OF THE COURT OF CLAIMS.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

A list of judgments of the Court of Claims against the United States presented for payment since June 14, 1886.

FEBRUARY 1, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 31, 1887.

SIR: I have the honor to transmit herewith a list of judgments given by the Court of Claims against the United States and presented for payment since the 14th day of June, 1886, the date of the last report of such judgments, aggregating $2,893,587.72, for the payment of which suitable provision should be made by Congress. It should be noted that many of these judgments are still subject to appeal by the United States, as well as by the claimant; hence I respectfully suggest that the contingency of such appeal by either of the parties be provided for by a suitable clause in the appropriation bill.

Respectfully, yours,

D. MANNING,
Secretary.

F.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

List of judgments of the Court of Claims, presented for payment since the 14th day of June, 1886, for which an appropriation should be made.

Name of claimant.	Judgment.			When payable if not appealed.
	Date.	Amount.	When presented for payment.	
Frank Hume	May 3, 1886	$117 60	Aug. 27, 1886	Nov. 27, 1886
William Wicks	May 10, 1886	71 79	Aug. 31, 1886	Nov. 31, 1886
The Choctaw Nation*	Dec. 15, 1886	2, 858, 798 62	Dec. 16, 1886	.....
The Board of Field Officers of the Fourth Brigade of South Carolina Volunteer State troops.	Dec. 20, 1886	10, 316 00	Dec. 21, 1886	Mar. 21, 1886
David C. Gist	Jan. 10, 1887	314 00	Jan. 17, 1887	Apr. 17, 1887
John M. Francis	....do	4, 867 71	....do	Apr. 19, 1887
William F. Craig	Jan. 25, 1887	93 00	Jan. 29, 1887	Apr. 29, 1887
George W. Davidson	....do	203 00	....do	Do.
Delafield Du Bois	....do	269 00	....do	Do.
Duane W. Felshaw	....do	95 00	....do	Do.
Robert S. Friend	....do	1, 069 00	....do	Do.
Alexander B. Groves	....do	190 00	....do	Do.
William J. Gaudin	....do	334 00	....do	Do.
Rolph L. Goodrich	....do	951 00	....do	Do.
Thomas H. Butler	....do	93 00	....do	Do.
Lewis T. Baxter	....do	151 00	....do	Do.
James M. Brown	....do	212 00	....do	Do.
John W. Bennett	....do	50 00	....do	Do.
John R. Haskins	....do	597 00	....do	Do.
Dwight G. Hull	....do	136 00	....do	Do.
Elijah F. Hall	....do	17 00	....do	Do.
James S. Harvie	....do	131 00	....do	Do.
Jacob Johnson	....do	41 00	....do	Do.
Charles C. Morrow	....do	51 00	....do	Do.
Charles Martindale	....do	185 00	....do	Do.
Leroy Neale	....do	128 00	....do	Do.
Howard D. Spencer	....do	123 00	....do	Do.
Ezra T. Sprague	....do	29 00	....do	Do.
Adam C. Scott	....do	47 00	....do	Do.
George J. Thompson	....do	149 00	....do	Do.
Jonathan C. Tipton	....do	315 00	....do	Do.
Harvey S. Thompson	....do	334 00	....do	Do.
William J. Ware	....do	157 00	....do	Do.
Frank J. Washabaugh	....do	163 00	....do	Do.
M. E. Hutchinson	Jan. 26, 1887	925 00	Jan. 31, 1887	Apr. 31, 1887
James B. Harper	....do	94 00	....do	Do.
John W. Green	....do	351 00	....do	Do.
Joseph D. Husband	....do	115 00	....do	Do.
O. D. Laird	....do	60 00	....do	Do.
James P. Rader	....do	648 00	....do	Do.
John F. Burrow	....do	35 00	....do	Do.
Henry C. Cowles	....do	67 00	....do	Do.
Clayton C. Herr	....do	18 00	....do	Do.
George P. Waldron	....do	151 00	....do	Do.
Samuel Ellison	....do	87 00	....do	Do.
Joseph D. Husbands	....do	515 00	....do	Do.
A. Winslow	....do	166 00	....do	Do.
William J. Folsom	....do	217 00	....do	Do.
James W. Wartman	....do	166 00	....do	Do.
Thomas B. Ford	....do	114 00	....do	Do.
Frank W. Fant	....do	123 00	....do	Do.
William G. Bogle	....do	101 00	....do	Do.
Thomas L. Edelen	....do	340 00	....do	Do.
James H. Rose	....do	315 00	....do	Do.
Elbert Wallace	....do	379 00	....do	Do.
William Muirheid	....do	402 00	....do	Do.
Samuel Bell	....do	460 00	....do	Do.
D. D. Davies	....do	960 00	....do	Do.
James H. Tinsley	....do	631 00	....do	Do.
James D. Stevenson	....do	40 00	....do	Do.
Abner Hazeltine	....do	150 00	....do	Do.
Joseph W. Dimmick	....do	140 00	....do	Do.
William J. Gayer	....do	383 00	....do	Do.
John T. Green	....do	428 00	....do	Do.
William D. McKinstry	... do	52 00	....do	Do.
John G. Tufts	....do	113 00	....do	Do.
James D. Stevenson	....do	136 00	....do	Do.
James C. Anderson	....do	223 00	....do	Do.
George Paschal	....do	265 00	....do	Do.
A. T. Summey	....do	191 00	....do	Do.
Anthony Sambola	....do	231 00	....do	Do

*On mandate of Supreme Court

List of judgments of the Court of Claims, &c.—Continued.

Name of claimant.	Judgment.			When payable if not appealed.
	Date.	Amount.	When presented for payment.	
Fay Hempstead	Jan. 26, 1887	$214 00	Jan. 31, 1887	Apr. 31, 1887
John E. Pound	....do	615 00	....do	Do.
A. J. Northrup	....do	319 00	....do	Do.
Johnson T. Platt	....do	140 00	....do	Do.
W. G. B. Morris	....do	551 00	....do	Do.
James G. Harrison	... do	90 00	....do	Do.
Do	....do	17 00	....do	Do.
M. L. Rogers, administrator	....do	413 00	....do	Do.
Alfred E. Buck	....do	59 00	....do	Do.
J. H. Finks	....do	157 00	....do	Do.
J. E. Johnson	....do	422 00	....do	Do.
Total	.....	2,893,587 72		

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. Doc. No. 121.

PURCHASE OF BULLION AND COINAGE OF SILVER DOLLARS.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

A report of the Director of the Mint, in response to a resolution of the House adopted January 13, 1887, calling for information relative to the monthly purchase of bullion and coinage of silver dollars.

FEBRUARY 1, 1887.—Referred to the Committee on Coinage, Weights, and Measures and ordered to be printed.

TREASURY DEPARTMENT, *January* 31, 1887.

SIR: I have the honor to acknowledge the receipt of resolution of the House of Representatives dated 13th instant, as follows—

Resolved, That the Secretary of the Treasury be directed to report to the House how many dollars worth of silver bullion was purchased each month, and how many dollars worth was coined in each month of the fiscal year ending June 30, 1886; also how many dollars worth of silver bullion was purchased, and how many coined in each of the months of July, August, September, October, November, and December of 1886. Also whether the law requiring the purchase and coinage of not less than two millions worth of bullion per month has been complied with—

and in reply to inclose herewith copy of report, dated 29th instant, with inclosure, from the Director of the Mint, to whom the resolution had been referred, containing the information desired.

Respectfully, yours,

D. MANNING.
Secretary.

To the SPEAKER OF THE HOUSE OF REPRESENTATIVES.

TREASURY DEPARTMENT,
BUREAU OF THE MINT,
Washington, D. C., January 29, 1887.

SIR: I have the honor to forward herewith, for transmittal to the House of Representatives, in pursuance of House resolution of January 13, a statement showing "how many dollars worth of silver bullion was purchased each month, and how many dollars worth was coined in each

month of the fiscal year ending June 30, 1886; also how many dollars worth of silver bullion was purchased and how many coined in each of the months of July, August, September, October, November, and December of 1886."

It will be seen therefrom that the law requiring the purchase and coinage of not less than $2,000,000 worth of bullion per month has been complied with for the fiscal year ending June 30, 1886, as well as for the remaining six months of the calendar year 1886.

Very respectfully,

JAS. P. KIMBALL,
Director of the Mint.

The SECRETARY OF THE TREASURY.

Statement showing by months the cost of silver bullion purchased, delivered, and coined into silver dollars and the face value of the coinage for the fiscal year ending June 30, 1886, and for the six months ending December 31, 1886.

Months.	Silver purchased.		Coinage.	
	Cost of amount purchased.	Cost of amount delivered on month's purchases.	Cost of amount coined.	Face value of coinage.
1885.				
July	$1,561,864 67	$1,578,874 37	$1,582,571 32	$1,900,000
August	1,780,016 17	1,791,129 08	2,057,566 18	2,475,000
September	2,005,915 66	2,009,013 20	2,055,758 34	2,500,050
October	2,502,085 95	2,531,749 60	2,043,143 34	2,500,000
November	1,888,070 44	1,883,635 53	2,029,223 44	2,500,330
December	2,304,410 10	2,310,699 89	2,013,677 70	2,600,000
1886.				
January	1,563,719 61	1,581,467 88	2,084,850 92	2,600,000
February	1.585,569 67	1,602,221 82	2,079,780 69	2,600,000
March	2,077,993 17	2.094,071 05	2,080,903 69	2,600,360
April	1,907,499 84	1,975,954 66	2,071,888 30	2,600,000
May	1,609,114 99	1,620,594 62	2,055,755 18	2,600,000
June	3,406,342 89	3,418,591 10	1,919,934 90	2,463,165
Total fiscal year	24,255,603 16	24,398,002 80	24,075,054 00	29,838,905
1886.				
July	1,490,686,20	1,496,990 31	1,684,342 00	2,200,000
August	2,115,107 15	2,117,578 41	2,015,098 95	2,700,000
September	2,048,666 90	2,054,888 93	2,079,770 66	2,810,100
October	2,333,457 04	2,339,766 55	2,245,704 87	3,000,000
November	2,447,678 45	2,458,857 26	2,055,356 87	2,700,000
December	2,684,651 11	2,682,319 60	1,955,137 63	2,550,261
Total six months	13,120,246 85	13,150,401 06	12,035,410 98	15,960,351
Total eighteen months	37,375,850 01	37,548,403 86	36,110,464 98	45,799,266

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49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. DOC. No. 122.

FEES OF STEAMSHIP DAWN.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

SUBMITTING

Estimate of an appropriation to pay J. Hart & Co. for tax and fees imposed on the steamship Dawn and remitted by that Department.

FEBRUARY 1, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 31, 1887.

SIR: I have the honor to transmit herewith, for the consideration of Congress, copy of letter of the Commissioner of Navigation of the 29th instant, and inclosure, submitting an estimate for an appropriation of $455.76, to pay J. Hart & Co. the amount of tax imposed on the steamship Dawn as an undocumented vessel, $425.39, and admeasurement fees, $30.37, both tax and fees having since been remitted by this Department.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

TREASURY DEPARTMENT,
BUREAU OF NAVIGATION,
Washington, D. C., January 29, 1887.

SIR: I have the honor to inclose herewith a copy of a letter, dated the 21st instant, relative to the steamship Dawn, formerly the Caroline Miller.

Application was made for the remission of a tax of $425.39, and of admeasurement fees amounting to $30.37. Remission was granted by you accordingly, as shown by the inclosure.

In view of the facts, it is suggested that an estimate be submitted to Congress, with a view to an appropriation for the amount, payable to Messrs. J. Hart & Co.

Respectfully, yours,

C. B. MORTON,
Commissioner.

The SECRETARY OF THE TREASURY.

TREASURY DEPARTMENT,
OFFICE OF THE SECRETARY,
Washington, D. C., January 21, 1887.

SIR: On the 8th instant this Department informed you, on the evidence then before it in the case of the steamship Dawn, now documented as an American vessel under the name Caroline Miller, that had petition for refund of a tax of $425.39, imposed on the vessel as undocumented, and of admeasurement fees amounting to $30.37, been made within a year from the date of collection of the tax, as required by section 26 of the act of Congress of June 26, 1884, the tax might have been refunded.

The following facts appeared, as set forth in that letter, to wit:

"That the Dawn was wrecked near the Bahama Islands in June, 1884, and abandoned, and that her register was taken up by the proper British authorities and canceled; that on May 4, 1885, the hull was sold to F. C. Miller, an American citizen, who had her towed to Baltimore, where she arrived July 27, 1885.

"From your further report of the 12th of August last it appears that the hull and machinery of the Dawn were so damaged on entry that she could not carry cargo, and that she in fact imported no goods."

It now appears that protest was duly made against such payment within the legal time, whether that time be considered as fixed by section 2931, Revised Statutes, or by section 26 of the act of June 26, 1884; and that therefore the power of the Department exists unimpaired to take cognizance of the offense of the Dawn in making entry at a port of the United States while undocumented, thereby incurring, under the joint operation of sections 4219, 4225, Revised Statutes, and section 14 of the act of June 26, 1884, a penal tax of $1.03 per ton.

In view of the fact that the Dawn, on her entry at Baltimore, was a wrecked vessel, and not engaged in trade or capable of such employment, and that the entry was not in willful violation of law, this Department, by virtue of section 5293, Revised Statutes, hereby remits said penalty and admeasurement fee, but leaves the petitioners, J. Hart & Co., of Baltimore, to such relief in the premises as Congress may be disposed to grant.

Respectfully, yours,

D. MANNING,
Secretary.

The COLLECTOR OF CUSTOMS,
Baltimore, Md.

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49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. DOC. No. 123.

WATER SUPPLY, WASHINGTON, D. C.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

Estimates from the Secretary of War of appropriations for increasing the water supply of Washington, D. C., and for fish-ways at Great Falls, Potomac River.

FEBRUARY 1, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *January* 31, 1887.

SIR: I have the honor to transmit herewith, for the consideration of Congress, copy of letter of the Secretary of War, of the 29th instant, submitting estimates of appropriations for increasing the water supply of Washington, D. C., $175,000, and for erection of fish-ways at Great Falls, Potomac River, $25,000.

Respectfully yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

WAR DEPARTMENT,
Washington City, January 29, 1887.

SIR: I have the honor to forward, for transmission to Congress, estimates of appropriations required for "increasing the water supply of Washington, D. C., $175,000," and for "erection of fish-way at Great Falls, $25,000."

Very respectfully,

WM. C. ENDICOTT,
Secretary of War.

The SECRETARY OF THE TREASURY.

Detailed objects of expenditure, and explanations.	Total amount to be appropriated under each head of appropriation.	Amount appropriated for the current fiscal year, ending June 30, 1887.
Increasing the water supply of Washington, D. C.:		
For completion of the tunnel (August 4, 1886, vol. 24, p. 265, sec. 1)	$175,000 00	$555,000 00
Erection of fish-way at Great Falls:		
For completion of the fish-ways (July 15, 1882, vol. 22, p. 170, sec. 3)	25,000 00	.....

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., January 27, 1887.

SIR: I have the honor to submit the inclosed copy of a communication to this office, dated the 20th instant, from Maj. G. J. Lydecker, Corps of Engineers, giving an estimate of the sums that will be required to complete the tunnel for increasing the water supply of Washington, D. C., and for completing the fish-ways at the Great Falls of the Potomac River, as follows:

For completion of the tunnel	$175,000
For completion of the fish-ways	25,000

Major Lydecker presents good and sufficient reasons for the increase in the estimates for the work referred to, and recommends that the amounts be included as items in the general deficiency bill, to be prepared during the present session of Congress.

In connection with this subject he incloses a copy of the report of the Board of Engineers upon the examination of the tunnel, dated August 24, 1886.

Major Lydecker's views are concurred in by this office, and it is accordingly recommended that his letter and inclosure be transmitted to the Speaker of the House of Representatives, for the information of the Committee on Appropriations.

Very respectfully, your obedient servant,

J. C. DUANE,
Brig. Gen., Chief of Engineers.

Hon. WM. C. ENDICOTT,
Secretary of War.

OFFICE OF THE WASHINGTON AQUEDUCT,
Washington, D. C., January 20, 1887.

GENERAL: At the time when I prepared the last annual report on the works in my charge, the conditions were such that I could not present a reliable estimate of the amounts required to complete two of them, viz, (1) the tunnel for increasing the water supply of Washington, D. C., and (2) the fish-ways at the Great Falls of the Potomac. I have now the honor to report that the sums required for these purposes will be, for the tunnel $175,000, and for the fish-ways $25,000; and I respectfully recommend that Congress be requested to include those amounts as items in the general deficiency bill that will be prepared during the present session.

The general deficiency act approved August 4, 1886, appropriated $395,000 to complete the tunnel, but provided that no further work should be done until the Board of Engineers had determined "whether any changes are demanded for reasons of safety or economy in the method of lining heretofore adopted and pursued." The estimate on which the above amount was appropriated was made in July, 1885, and contemplated the use of dry stone packing, as a filling back of the brick arch of the lining; the Board of Engineers decided that rubble masonry, laid in cement mortar, should be used instead of the proposed dry stone packing. (See report of the Board, copy of which is transmitted herewith.) The cost of rubble masonry is $2.25 per cubic yard greater than that of the dry stone packing, and the work, when com-

pleted, will contain about 32,000 cubic yards of that masonry; this accounts for $72,000 of the additional amount now asked for. The present estimate is based on conditions as they are known to be at this date; when there is only 1,275 feet in length of tunnel remaining to be excavated, whereas in the estimate of July, 1885, we had to rely on surmises, so far as it related to the then undeveloped portions of the work, accordingly it is now known that there must be an increase of nearly 10 per cent. in the estimated length of lining, and that the length of excavation through treacherous ground, calling for timbering, will be more than double that contemplated in the estimate of 1885. A comparison of the two estimates, in the respects referred to above, is tabulated in the following statement, which, in the estimated cost of tunnel excavation and lining, shows a total increase of $150,273.50.

Tabular statement comparing estimates for excavation and lining of tunnel as made July 31, 1885, *and December* 31, 1886.

[Excavation at $8 per cubic yard.]

Section.	Estimate of July 31, 1885.			Estimate December 31, 1886.		
	Linear feet.	Cubic yards.	Cost.	Linear feet.	Cubic yards.	Cost.
Unlined or normal	9,823	30,014	$240,112	8,200	25,055	$200,440
Lining, without timber	10,093	40,996	327,968	10,600	43,056	344,448
Lining, with timber	*800	4,603	36,824	†1,900	11,645	93,160
Total	20,716	75,613	604,904	20,700	79,756	638,048

*The average cross-section was estimated at 155.35 square feet.
†About 1,750 feet will be for side and top timbers, section 167.37 square feet. About 150 feet for top timber only, section 143.4 square feet.

Lining.

Character of masonry.	Estimate, July, 1885, length of lining, 10,893 feet.		Estimate, December 31, 1886, length of lining, 12,500 feet.	
	Cubic yards.	Cost.	Cubic yards.	Cost.
Brick masonry, at $14 per cubic yard	13,147	$188,258 00	15,430	$216,020 00
Concrete masonry, at $5 per cubic yard	4,575	22,875 00	4,630	23,150 00
Dry stone packing, at $2.50 per cubic yard	*25,163	62,907 50	.....	.....
Rubble masonry, at $4.75 per cubic yard	.....	.....	*32,000	152,000 00
Total	43,185	274,040 50	52,060	391,170 00

* The average area of section between the brick arch and rock in place to be filled with dry stone packing (for which rubble masonry is substituted) was originally estimated at 62.37 square feet, but the recent measurements show that this must be increased to about 69 square feet.

SUMMARY.

Estimate for excavation, December, 1886	$638,048 00	
Estimate for excavation, July, 1855	604,904 00	
Increased estimate for excavation		$33,144 00
Estimate for lining, December, 1886	391,170 00	
Estimate for lining, July, 1885	274,040 50	
Increased estimate for lining		117,129 50
Total increase		150,273 50

The remaining $24,726.50, going to make up the $175,000 now asked for, is designed to cover contingencies of engineering, superintendence, &c., and to provide for emergencies that cannot be foreseen, so that we shall run no risk of being found without sufficient funds on hand to complete the work.

In relation to the estimate for the fishways, I would simply state that it was made after consultation with the assistant to the United States Commissioner of Fisheries, under whose directions the plans for the work are prepared. The amount named is the least that is admissible for undertaking the reconstruction and completion of the fishways in the exposed locality where they are to be erected; it is indeed a question whether it would not be advisable to increase the amount to $30,000.

Very respectfully, your obedient servant,

G. J. LYDECKER,
Major of Engineers, U. S. A.

Brig. Gen. JAMES C. DUANE,
Chief of Engineers, U. S. A., Washington, D. C.

[Office of Board of Engineers for Fortifications and for River and Harbor Improvements, &c.]

ARMY BUILDING, NEW YORK, *August* 24, 1886.

GENERAL: The Board of Engineers for Fortifications and for River and Harbor Improvements has the honor to report that, pursuant to your instructions of August 12, 1886, it met in Washington, August 17, at Major Lydecker's office, and, assisted by that officer and by Mr. Coryell, the superintendent, made an examination of the maps and records bearing upon the subjects on which it is required to report by the deficiency act approved August 4, 1886. On August 18 it made a personal examination of the tunnel, in company with Major Lydecker, entering by the Champlain avenue working shaft, and examining in the west drift some of the worst rock encountered in the whole tunnel, and in the east drift some of the best. Major Lydecker states that these extremes, with the intermediate grades inspected, will afford a fair idea of the variations in the character of the work to be done. The Board then proceeded to the site of the new reservoir, near the Soldiers' Home, and made an inspection of its present condition and of the methods employed in its construction. A second meeting was held at Major Lydecker's office, at which Captain Symons, Corps of Engineers, until recently in immediate supervision of the work on the tunnel, was present, and the whole subject was minutely discussed.

The following conclusions of the Board have been reached from information thus obtained, and after closely considering House Report No. 3109, Forty-ninth Congress, first session, with the documents appended thereto. The Board indorses the use of brick in the lining of the tunnel. The exclusive use of concrete, in its opinion, is impracticable.

The character of the rock encountered in this tunnel is unfavorable to endurance from its tendency to deteriorate when exposed to the air. In some places this change has already occurred; at others, rock which when blasted is sound and hard will sometimes remain so, while that excavated only a few feet away will in a few months crumble almost into clay. Iron pyrites is often detected, and analysis indicates that it is not the only cause of the trouble. Impure mica, magnesium silicate

in a talcose form, and perhaps other causes of degeneration are present. The headings were started from the different shafts in sound rock, giving no indication of the probable presence of this disintegrating rock on the line of the tunnel, and there appears to be no reason why better results should have been anticipated by carrying the shafts and the tunnel any lower; if the bad character of the rock had been anticipated, the grade of the tunnel would have been fixed much higher. The work has now advanced too far for any change in grade to be practicable, and it only remains to make suitable provision to resist the hydraulic pressures to be apprehended.

Where the rock is solid and can safely be trusted to resist disintegration, which the engineer in charge judges from present appearances will be the case for about four-tenths of the length of the tunnel, no lining is necessary and no change in the present cross-section is suggested.

Where the rock, although fairly good, is unsafe to trust without lining, the present plan is to line with a 13-inch (3-brick) arch and fill in solidly with dry stone between the bricks and the rock in place. The Board recommends that such places shall be filled with rubble laid in cement mortar, or with fine concrete packed solidly around larger stones, according to convenience. No motion can be permitted among the stones which are to transmit the ultimate pressure to the rock in place, and this can only be certainly accomplished by filling up all interstices with a solid mass.

Where the rock is still worse, so that timbering becomes necessary to the safety of the miners, the present plan is to insert such beams as may be needed, and leave them in position. The Board advises the removal of all wood when practicable; and when not, to bed it in a solid mass of concrete or rubble, filling all voids.

Finally, the case of overhead falls of rock, producing extensive dome-like cavities, is presented. Fortunately, these are not common, only two of very large size being reported by the engineer in charge. The Board visited the site of the worst one. It extended 31 feet along the axis of the tunnel, and the fall had crushed the timbering and temporarily imprisoned the men at work. To obtain security the overhead cavity had been at once filled with about forty cords of wood, laid up as well as possible from the bottom, and the tunnel had been lined for a length of 52 feet with brick, increased overhead at the most exposed portions to 18 inches in thickness (4 bricks). The space between the brick arch and the wood overhead, and between the arch and the rock in place on the sides, had been filled in with dry stone, packed as closely as possible.

While it is probable that wood in such positions will be covered ultimately by water, this will not be true until the tunnel is filled; and in the mean time dry rot may be at work among this wood, as was seen to be the case with the beams in several localities. But even if this be not so, the wood, from its elasticity, especially when laid up under such disadvantages, cannot be trusted to transmit the pressure, tending to rupture the brick arch when the tunnel is filled. The Board therefore considers that before the work is completed all wooden backing should be replaced by solid masonry, by means of auxiliary drifts run over the tunnel, and filled solid with masonry; or by a new tunnel around the site of the cave, filling up the present tunnel with masonry, or by a shaft sunk at the locality, as may prove to be most economical.

In these recommendations the Board has considered that the counter-pressure due to ground water or to water filtering through the lining of the tunnel is too uncertain and too liable to variation at different localities to be counted upon to give a sufficient support to the brick lining.

In a case like the present, where a serious injury would entail consequences so disastrous, the brick-work should be backed so solidly as to serve merely as a vehicle for transmitting the pressure to the rock in place. In the valleys of Rock Creek and Foundry Creek, which have points where the ground is 135 and 50 feet, respectively, below the water surface in the reservoirs, and where the unbalanced pressures will probably reach 58 and 21 pounds per square inch, all the lining and backing, wherever the rock is not unchanging and impermeable, should be done with the greatest care in the most substantial way, and with mortar rich in cement.

This rule should also apply for considerable distances from these valleys, since rock-seams leading from the tunnel into these or other depressions might much reduce the head of ground water which would otherwise exist there, to balance the internal pressure upon the lining of the tunnel.

The inspection of the new reservoir satisfied the Board that the work is proceeding in an entirely satisfactory manner, as proposed by the special Board of 1885, and this Board has no changes to recommend.

The total length of the tunnel, when completed, will be 20,700 feet, and the engineer in charge states that the aggregate length then lined will in round numbers be about 12,000 feet, of which about 2,475 feet will probably have been timbered. At the present time 1,740 feet have been lined and 1,175 feet timbered, these lengths being included in the above figures.

Respectfully submitted.

J. C. DUANE,
Col. of Eng. and Bvt. Brig. Gen., U. S. A.
HENRY L. ABBOT,
Lieut. Col. Eng. and Bvt. Brig. Gen.
C. B. COMSTOCK,
Col. of Eng. and Bvt. Brig. Gen.
WALTER MCFARLAND,
Lieut. Col. of Engineers.

Brig. Gen. JOHN NEWTON,
Chief of Engineers U. S. A., Washington, D. C.

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49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 124.

LAKE SUPERIOR SHIP-CANAL.

LETTER

FROM

THE SECRETARY OF WAR,

TRANSMITTING

Correspondence relative to the proposed sale to the Government of the properties of Lake Superior Ship-Canal Railway and Iron Company, and of the Portage Lake and River Improvement Company.

FEBRUARY 1, 1887.—Referred to the Committee on Rivers and Harbors and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 28, 1887.

The Acting Secretary of War has the honor to transmit to the House of Representatives, for the information of the Committee on Rivers and Harbors, a letter of the 25th instant from the Chief of Engineers, and a copy of one from Col. H. L. Abbot, Corps of Engineers, relative to the sale of the capital stock of the Lake Superior Ship-Canal Railway and Iron Company, together with copies of letters from the owners of a majority of the shares of capital stock in said corporation, offering to cause meetings of the stockholders to be held with the view to selling and conveying to the United States all of said properties whenever the Government shall indicate a desire to purchase the same for $350,000.

S. V. BENÉT,
Brig. Gen., Chief of Ordnance,
and Acting Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., January 25, 1887.

SIR: I have the honor to submit the inclosed copies of a letter to this office from Col. H. L. Abbot, Corps of Engineers, and of a communication addressed to him by the owners of a majority of the shares in the capital stock of the Lake Superior Ship-Canal Railway and Iron Company and of the Portage Lake and River Improvement Company, of-

fering to cause meetings of said corporations to be held with a view to selling and conveying to the United States all of said properties, whenever, within six months of the close of the present session of Congress, the Government shall indicate its desire to purchase said properties for the gross sum of $350,000, and to suggest that they be transmitted to the Speaker of the House of Representatives for the information of the Committee on Rivers and Harbors.

In this connection attention is respectfully invited to the report of the Board of Engineers, constituted in obedience to the requirements of the river and harbor act of August 5, 1886, to consider certain questions in reference to the Portage Lake and River Improvement Company Canal and the Lake Superior Ship-Canal Railway and Iron Company Canal, submitted to the Secretary of War by letter from this office of January 6, 1887.

Very respectfully, your obedient servant,

J C. DUANE,
Brig. Gen., Chief of Engineers.

Hon. WILLIAM C. ENDICOTT,
Secretary of War.

ARMY BUILDING,
New York, January 15, 1887.

GENERAL: I have the honor to inclose herewith a letter received this morning from the owners of a majority of the shares in the capital stock of the Lake Superior Ship Canal Railway and Iron Company, and of the Portage Lake and River Improvement Company, offering to cause meetings of said corporations to be held, and at such meetings to vote to sell and convey to the United States all said properties whenever within six months after the close of the present session of Congress the Government shall indicate its desire to purchase said properties for the gross sum of $350,000.

This communication, had it been received in time, would have been appended to the report of the board recently appointed to report upon the subject of the purchase of these properties.

Very respectfully, your obedient servant,

HENRY L. ABBOT,
Col. of Engineers, Bvt. Brig. Gen.

Brig. Gen. J. C. DUANE,
Chief of Engineers, U. S. A.

OFFICE OF SECRETARY AND TREASURER
LAKE SUPERIOR SHIP CANAL, RAILWAY AND IRON COMPANY,
Lowell, Mass., December 31, 1886.

SIR: Referring to your letters of the 2d of October last, addressed to the secretaries of the Lake Superior Ship Canal, Railway and Iron Company and Portage Lake and River Improvement Company, requesting to be informed of the terms on which certain properties of those corporations will be sold to the United States, &c.

It is understood that the possession of the property referred to by the two corporations is essential to the enjoyment and exercise of their respective franchises, and that therefore neither the directors nor other officers of the corporations have authority to convey such property or legally bind the corporations thereto without a vote of the stockholders of the respective corporations at meetings thereof specially called and held therefor. As such meetings have not been held, your letters herein referred to have been laid before us (the trustees of the estate of the late J. C. Ayer, Theodore M. Davis, Frederick Ayer, and Gordon Norrie), who are owners of a majority of the shares in the capital stock in both of said corporations, and in order that you may

have as authoritative a reply to your inquiry as the circumstances will admit, we have conferred together and now take the liberty of informing you that the canals and river improvements of the corporations—together forming but one continuous route or passage from lake to lake across "Keweenaw Point"—are so connected and dependent upon each other that they cannot be properly and economically maintained and operated separately, and, therefore, we do not deem it expedient or for our or the public interest that one should be sold to the Government unless both are sold.

We are willing that both properties—that is to say, the canal of the Lake Superior Ship Canal, Railway and Iron Company from Lake Superior to Portage Lake, with all its piers and appurtenances, and the canals and river improvements of the Portage Lake and River Improvement Company from Portage Lake to Keweenaw Bay, with all their piers and appurtenances—should be sold and duly conveyed to the United States, free from all incumbrances, for the gross sum of $350,000, and (each herein speaking for himself and not one for another) whenever within six months after the close of the present session of Congress, the Government shall indicate its desire and readiness to purchase said properties at said price, we will cause meetings of the said corporations to be duly called, and at such meetings will vote to authorize and direct all said properties to be sold and conveyed to the United States for said sum.

Most respectfully,

FRED. F. AYER,
JOSEPHINE M. AYER,
BENJ. DEAN,
JACOB ROGERS,
Trustees of Estate of James C. Ayer.
THEO. M. DAVIS,
G. NORRIE,
F. AYER,

General HENRY L. ABBOT,
Lieut. Col. of Engineers U. S. A.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 125.

PUBLIC BUILDINGS, KEY WEST, FLA., AND NEW YORK CITY.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

Letter from the Supervising Architect relative to proposed additional appropriations for public buildings at Key West, Fla., and New York City.

FEBRUARY 1, 1887.—Referred to the Committee on Public Buildings and Grounds and ordered to be printed.

TREASURY DEPARTMENT,
Washington, January 29, 1887.

SIR: I transmit herewith copy of a communication from the Supervising Architect of this Department, in reference to an additional appropriation for the pile foundation of the United States custom-house building at Key West, Fla.; also, copies of letters from the collector of the port of New York, and the superintendent of repairs of that city, in relation to the advisability of making an appropriation of $250,000 for building an additional story on the custom-house building in New York, to afford the temporary accommodation required for the proper transaction of the customs business in that city.

Respectfully yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

TREASURY DEPARTMENT,
OFFICE OF THE SUPERVISING ARCHITECT,
January 28, 1887.

SIR: I have the honor to call your attention to the fact that an examination of the site for the custom-house building at Key West, Fla., shows that to secure a safe foundation it will be necessary to drive piles under all exterior and interior walls. It is estimated that an expenditure of $8,000 will be required for this purpose, and an appropriation of this amount is requested for the building, in excess of the limit of cost

fixed, as no item for such extra expenditure was included in the approved estimate for the building, as it was entirely unforeseen.

To avoid delay the appropriation should be made as soon as practicable.

Respectfully yours,

M. E. BELL,
Supervising Architect.

The SECRETARY OF THE TREASURY.

CUSTOM-HOUSE, NEW YORK CITY.
Collector's Office, January 17, 1887.

SIR: In pursuance of the correspondence heretofore had on the subject, I herewith submit for the consideration of the Department, photographs, plans, and approximate estimate of cost (furnished to me by William J. Fryer, jr., Superintendent of Repairs) covering the proposed improvements in the custom-house building, viz, the remodeling of the present fifth story and the addition of a sixth story with an absolutely fire-proof roof, thereby doing away with the present insecure condition of the upper part of this building as to fire risk.

I advise early attention to the subject, as the room is needed in order to furnish proper facilities for the rapid and efficient discharge of the business of the port.

In suggesting these improvements I am not overlooking the necessity for Congress to provide at an early day for the erection of suitable buildings for the custom-house and appraiser's stores, for even should Congress take action to that end at the present session it would be years before the structure could be erected; whereas the improvements contemplated by the plan, &c., now sent would afford room for greatly improved equipment for doing the business during the erection of the new buildings.

Yours, very respectfully,

D. MAGONE,
Collector.

(The photographs, &c., are under separate cover.)

The SECRETARY OF THE TREASURY.

[Office of Superintendent of Repairs, United States Public Buildings.]

NEW YORK, *January* 15, 1887.

SIR: Agreeably to a verbal request made by you to me in December last, I have prepared and now have the honor to submit to you herewith plans for remodeling the present fifth story and placing an additional story (a sixth story) on the custom-house building in this city.

I also submit three photographs of the building, as follows:

1. A front view on Wall street, the northwest corner of the building being in the foreground, thus showing a portion of William street front.

2. A view of the southeast corner, thus showing the front on Exchange Place and a portion of the front on Hanover street.

3. A view of the southwest corner of the building, thus showing the front on William street and a portion of the front on Exchange Place.

The drawings submitted are as follows:

A. Plan of present fifth-story floor.

B. Plan of a proposed sixth-story floor.

C. Plan of roof, showing glass ventilating skylights and glass coverings over the entire court-yard openings.

D. Section through the present fifth story and through the proposed sixth story, and section showing glass roof and ventilating skylight to be placed over court yards.

E. A small portion of the front elevation, showing the main cornice of building, the present fifth story, and the new sixth story, which is to be placed above the line indicated, and to extend, of course, around all four sides of the building.

It is proposed to remove the roof from the present fifth story, putting a fire-proof floor where the roof now is, and making a new sixth story, constructed entirely fire-proof. All that is now in the fifth story to be removed, and that story put in first-class condition for office purposes. Both the fifth and the sixth stories will be divided up in offices, of such size, &c., as you may hereafter direct. The partitions to divide up the large rooms into small offices are not shown on the plans, but have been esti-

mated for in making up an approximate total cost. Four passenger elevators are to be put in, running from the basement to the sixth story. Balcony corridors, staircases, water-closets, gas pipe and fixtures, steam-heating appliances, water-supplies, water-tanks, &c., are all taken cognizance of and included in the proposed improvement. Over the open courts, entirely surrounding the central dome, is to be placed a glass-roof construction, with ample ventilation provided for. The additional sixth story will be of granite, on the fronts of all four streets, in style corresponding with the appearance of the present fifth story, which latter story itself was an addition, put on some years ago, to the main building.

An approximate cost of the proposed improvements and additions, complete in every respect, will be $250,000—not to exceed that sum.

Very respectfully,

WM. J. FRYER, JR.,
Superintendent of Repairs.

HON. DANIEL MAGONE.

O

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 126.

CIVILIAN ENGINEERS.

LETTER

FROM

THE SECRETARY OF WAR,

TRANSMITTING

A list of the names and places of residence of civilian engineers employed on works of river and harbor improvement.

FEBRUARY 1, 1887.—Referred to the Committee on Rivers and Harbors and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 29, 1887.

The Secretary of War has the honor to transmit to Congress, in compliance with the provisions of section 8 of the river and harbor act of August 5, 1886, a report of the Chief of Engineers, dated the 26th instant, submitting a statement showing the name and place of residence of each civilian engineer employed in the work of improving rivers and harbors to October 31, 1886, under appropriations made by the above-named act, the time so employed, the compensation paid, and the place at and work on which employed.

WM. C. ENDICOTT,
Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., January 26, 1887.

SIR: The river and harbor act, approved August 5, 1886, provides in section 8—

> That the Secretary of War shall report to Congress, at its next and each succeeding session thereof, the name and place of residence of each civilian engineer employed in the work of improving rivers and harbors by means and as the result of appropriations made in this and succeeding river and harbor appropriation bills, the time so employed, the compensation paid, and the place at and work on which employed.

And, in obedience to its requirements, I have the honor to submit a statement, prepared from data received from officers in charge of the

different engineering districts, supplying the information called for up to and including October 31, 1886, so far as payments have been made from the appropriations of August 5, 1886, for river and harbor improvements.

Very respectfully, your obedient servant,

J. C. DUANE,
Brig. Gen., Chief of Engineers.

Hon. WM. C. ENDICOTT,
Secretary of War.

Statement showing "name and place of residence of each civilian engineer employed" to October 31, 1886, under appropriations made by the river and harbor act approved August 5, 1886, "the time so employed, the compensation paid, and the place at and work on which employed."

Name and place of residence.	Time employed.	Compensation (per month).	Where employed.	Work on which employed.
Thomas J. Lee, Washington, D. C.	$1\frac{15}{30}$ months..	$350 00	Office Chief of Engineers.	River and harbor improvements.
Richard W. Burgess, Washington, D. C.	....do	300 00	.....do	Do.
A. C. Both, Portland, Me.	$2\frac{5}{6}$ months.....	200 00	Portland, Me	Portland Harbor, Back Cove, Portland; Lubec Channel, Moose-a-bec Bar, York Harbor, Saco River, Maine.
Joseph Veazie, Boston, Mass.	2 months.....	200 00	Office engineer in charge, Boston, Mass.	Boston Harbor, Newburyport Harbor; harbors at Provincetown, Plymouth, Scituate, Lynn, Hingham, and harbor of refuge, Sandy Bay, Cape Ann, Massachusetts.
Sophus Haagensen, Boston, Mass.	....do	175 00	.....do	Harbors at Newburyport, Provincetown, Plymouth, Scituate, Hingham, Wellfleet, and Winthrop, Mass.
H. F. Bothfeld, Gloucester, Mass.	....do	165 00	Gloucester, Mass	Gloucester Harbor, Mass.
N. W. Eayrs, Newport, R. I.	$\frac{12}{30}$ months	200 00	Newport, R. I	Harbor at Newport, R. I.
Edward Parrish, Newport, R. I.	$1\frac{25}{30}$ months ...	150 00	.....do	Harbor of refuge, Wood's Holl, Mass.
William F. Smith, Wilmington, Del.	$1\frac{15}{30}$ months....	250 00	Wilmington, Del	Wilmington Harbor and ice harbor at New Castle, Del.; Maurice, Broadkiln, Indian, Nanticoke, Saint Jones rivers; Duck, Mispillion, and Broad creeks; Susquehanna above and below Havre-de-Grace; Chester, Wicomico, Choptank, and Pocomoke rivers; Corsica Creek; Upper Thoroughfare at Deil's Island, and inland waterway, from Chincoteague Bay, Va., to Delaware Bay, at or near Lewes, Del.
Charles Humphreys, Wilmington, Del.	$1\frac{9}{30}$ months....	150 00	Laurel, Del., between Assawoman Bay and Indian River Bay, Delaware, and Wilmington, Del.	Nanticoke River, Delaware, and waterway from Chincoteague Bay to Indian River Bay, Virginia, Maryland, and Delaware.
A. M. Scott, Charleston, W. Va.	1 month	250 00	Charleston, W. Va.	Great Kanawha and Elk rivers, West Virginia.
Thomas E. Jeffries, Charleston, W. Va.	....do	125 00	Great Kanawha River.	Lock and Dam No. 6.
John B. Duncklee, Washington, D. C.	$2\frac{5}{6}$ months	175 00	Washington, D. C	Potomac River, near Washington, D. C.

Statement showing name and place of residence of each civilian engineer, &c.—Continued.

Name and place of residence.	Time employed.	Compensation (per month).	Where employed.	Work on which employed.
S. T. Abert, Washington, D. C.	3 months.....	$250 00	Washington, D. C	Improvement of the harbors at Breton Bay and Saint Jerome's Creek, Maryland; of the channel at Mount Vernon, Va.; of Rappahannock River; of York River; of tributaries of the Lower Potomac, and of certain rivers in Virginia and North Carolina.
Clarence M. Clark, Washington, D. C.	....do	125 00	Washington, D. C., and Pamunky and Mattaponi rivers, Virginia.	Office work and survey of Pamunky and Mattaponi rivers, Virginia.
L. R. Grabill, Springfield, Mo.	$2\frac{6}{30}$ months....	120 00	Dan River, Virginia and North Carolina, and Rappahannock River, Virginia.	Survey of shoals on Dan River, Virginia and North Carolina, and assistant in charge of work of repairs on Rappahannock River, Virginia.
H. J. Gielow, Norfolk, Va.	1 month	150 00	Norfolk and Petersburg, Va.	Improving Appomattox River, Virginia.
Reid Whitford, Georgetown, S. C.	$1\frac{25}{30}$ month.....	150 00	Georgetown, S. C	Georgetown Harbor, Santee, Great Pee Dee, and Waccemaw rivers.
E. D. Thompson, Wilmington, N. C.	$\frac{18}{30}$ month.....	150 00	Wilmington, N. C ...	Pamplico and Tar rivers, North Carolina.
R. Ransom, New Berne, N. C.	$\frac{6}{30}$ month.....	175 00	New Berne, N. C.....	Beaufort Harbor, North Carolina.
John L. Suess, Jersey City, N. J.	$2\frac{5}{6}$ months.....	200 00	New York City.....	Harbors of Charleston, S. C., and Savannah and Brunswick, Ga.; Ashley River and Wappoo Cut, South Carolina; Cumberland Sound, Georgia and Florida; Savannah and Altamaha rivers, and Romerly Marsh, Georgia; Edisto and Salkahatchie rivers, South Carolina.
James P. Allen, Charleston, S. C.	$2\frac{23}{30}$ months....	150 00	Charleston, S. C.....	Harbor at Charleston, S. C.
John H. Westfield, Savannah, Ga.	$2\frac{1}{2}$ months.....	150 00	Savannah, Ga.....	Savannah river, Georgia.
A. S. Cooper, Savannah, Ga.	$1\frac{1}{2}$ months.....	135 00	.....do	Harbor at Savannah, Ga.
R. G. Thomas, Charleston, S. C.	10 days	135 00	..... do	Altamaha River, Georgia.
A. W. Barber, Jacksonville, Fla.	1 month	140 00	Engineer office, Jacksonville, Fla.; Cedar Keys, Fla., and Manatee River, Fla.	Harbor at Cedar Keys, Fla. Manatee and Pease rivers, Florida.
Hiram Haines, Montgomery, Ala.	2 months 6 days	175 00	Pensacola Harbor and Conecuh-Escambia River, between Andalusia, Ala., and Molino, Fla.	Harbor at Pensacola, Fla, and Conecuh-Escambia River, Florida and Alabama.
William A. Gould, Newburyport, Mass.	....do	150 00	Choctawhatchie River, between Caryville, Fla., and Newton, Ala.	Choctawhatchie River, Florida and Alabama.
F. C. Armstrong, Saint Louis, Mo.	1 month 25 days.	150 00	Alabama River, between Wetumpka and its mouth.	Alabama River, Alabama.
P. M. Slaughter, Albany, Ga.	2 months 6 days.	150 00	Chattahoochee River, between Columbus, Ga., and Chattahoochee, Fla., and Flint River, between Montezuma and 20 miles below Albany, Ga.	Chattahoochie River, Georgia and Alabama, and Flint River, Georgia.
M. T. Singleton, Forsyth, Ga.	1 month 15 days.	150 00	Ten Island Shoals Canal, Coosa River.	Coosa River, Georgia and Alabama.
P. C. Boudousquie, Mobile, Ala.	1 month	200 00	Mobile Harbor, Alabama.	Harbor at Mobile, Ala.

Statement showing name and place of residence of each civilian engineer, &c.—Continued.

Name and place of residence.	Time employed.	Compensation (per month).	Where employed.	Work on which employed.
Fred Rettig, Mobile, Ala.	2 months	$150 00	Pearl River, Mississippi.	Pearl River, Mississippi, below Jackson.
C. Donovan, Port Eads, La.	August 5 to October 31, 1886.	200 00	South Pass jetties	Examinations and surveys at South Pass of the Mississippi River.
Thomas. L. Raymond, New Orleans, La.	....do	175 00	In office and in the field.	Improving Calcasien River and Pass, Louisiana, and Sabine Pass, Texas.
Hart Vance, Louisville, Ky.	Since September 1, 1886.	200 00	Red River, Louisiana and Arkansas.	In charge of survey, Red River.
Francis Smith Burrows, Lancaster, Pa.	Since August 23, 1886.	150 00	.....do	In charge of field party, Red River.
Neville B. Craig, Allegheny City, Pa.	Since August 22, 1886.	150 00	.....do	Do.
Arthur Hider, Louisville, Ky.	1 month..... ....do	150 00 200 00	Wilson Point, Louisiana.	Lake Providence Reach, care of fleet and in charge of repairs to same.
H. St. L. Coppée, Vicksburg, Miss.	2 months.....	125 00	Vicksburg, Miss	Repair of Delta Point, Louisiana, and survey of Vicksburg Harbor.
W. M. Reese, Memphis, Tenn.	1 month	100 00	Memphis, Tenn	Protection Memphis Harbor.
Aug. J. Nolty, Sans Souci, Ark.	2 months.....	125 00	Plum Point Reach....	Care of property and repair of plant.
J. A. Ockerson, Saint Louis, Mo.	From August 6, 1886.	200 00	Saint Louis, Mo	Survey of Mississippi River.
L. L. Wheeler, Saint Louis, Mo.	....do	175 00	.....do	.....do .....
Edward Molitor, Saint Louis, Mo.	....do	175 00	.....do	.....do .....
C. W. Clark, Saint Louis, Mo.	....do	125 00	.....do	.....do .....
Kivas Tully, Saint Louis, Mo.	....do	125 00	.....do	.....do .....
John Ewens, Saint Louis, Mo.	....do	125 00	.....do	.....do .....
L. C. Jones, Saint Louis, Mo.	From August 9, 1886.	110 00	.....do	.....do .....
E. H. Twining, New York City.	From August 5, 1886.	150 00	New York City.....	.....do .....
H. W. Baker, Saint Louis, Mo.	Aug. 5 to Oct. 31, 1886.	150 00	Saint Louis, Mo	Draughting, computing, and estimating in connection with repairs to and construction of plant belonging to the Mississippi River Commission.
E. F. Officer, Little Rock, Ark.	$2\frac{25}{30}$ months ...	150 00	U. S. quarter-boat Albany.	Improving White River, Arkansas.
C. L. Kraft, Chicago, Ill.	$2\frac{25}{30}$ months ...	125 (	U. S. snag-boat A. B. Johnson.	Improving Saint Francis River, Arkansas and Missouri.
C. E. Taft, New York, N. Y.	$1\frac{10}{30}$ months ...	150 00	Survey of White River, Arkansas.	Improving White River, Arkansas.
J. R. Van Frank, Tyronza, Ark.	$\frac{25}{30}$ month.....	150 00	.....do	.....do .....
H. N. Allen, Little Rock, Ark.	$\frac{26}{30}$ month.....	125 00	.....do	.....do .....
J. S Brantley, Little Rock, Ark.	$\frac{26}{30}$ month.....	100 00	.....do	.....do .....
F. A. Slater, Judsonia, Ark.	1 month	100 00	.....do	.....do .....
William Hall, Vandale, Ark.	$\frac{25}{30}$ month.....	100 00	.....do	.....do .....
P. B. Houston, Little Rock, Ark.	$1\frac{3}{30}$ months....	125 00	Perryville, Ark	Fourche Le Fevre River, Arkansas.
D. M. Currie, Kimmswick, Mo.	2 months	200 00	Saint Louis, Mo	Improving Mississippi River between mouths of Ohio and Illinois rivers, Illinois and Missouri.
E. E. Furney, Saint Louis, Mo.	2 months	200 00	.....do	Removing obstructions in Missouri River, Missouri.
J. W. Beaman, Washington, D. C.	2 months	150 00	Hermann, Mo.....	Osage River, Missouri and Kansas; Gasconade River, Missouri.

Statement showing name and place of residence of each civilian engineer, &c.—Continued.

Name and place of residence.	Time employed.	Compensation (per month).	Where employed.	Work on which employed.
M. Meigs, Keoknk, Iowa.	2 months	$250 00	Des Moines Rapids Canal, vicinity of Burlington, Iowa (Shokokon Slough).	Dry-dock at Des Moines Rapids Canal; Des Moines Rapids, Mississippi River, Iowa and Illinois; operating and care Des Moines Rapids Canal, Mississippi River, Saint Paul to Des Moines Rapids.
C. W. Durham, Rock Island, Ill.	....do	200 00	Crooked Slough, Rock Island Rapids.	Mississippi River, from Saint Paul to Des Moines Rapids.
J. H. Darling, Duluth, Minn.	½ month	180 00	Duluth, Minn.....	Harbor at Agate Bay, Minnesota.
F. T. Hampton, Hill City, near Chattanooga, Tenn.	1 month	200 00	Office superintending engineer, Saint Paul, Minn.	Principal assistant, office superintending engineer, Saint Paul.
R. Davenport, Saint Paul, Minn.	...do	180 00	Red River of the North, near Grand Forks, Dak.	Red River of the North, Minnesota and Dakota.
	...do	200 00		
A. O. Powell, Milwaukee, Wis.	....do	180 00	Chippewa River, Wisconsin, at Eau Claire and Five-Mile Bluff Bar.	Chippewa River, Wisconsin.
Robert Hooke, Chattanooga, Tenn.	2 months.....	175 00	Mussel Shoals Canal, Tennessee River.	Lock and section work and building aqueduct.
W. A. Toms, Wheeler, Ala.	....do	150 00	Elk River Shoals Canal, Tennessee River.	Lock and section work.
W. A. Barlow, Chicago, Ill.	7 days	150 00	U. S. Engineer Office, Chattanooga, Tenn.	Preparing plans, &c., for steamboat, for use at Mussel Shoals, &c.
William Weston, Cincinnati, Ohio.	2 months.....	200 00	Marietta, Ohio.....	Ice harbor at mouth of Muskingum River.
E. J. Carpenter, Cincinnati, Ohio.	3 months	175 00	On Ohio River dredges.	Improvement of the Ohio River.
I. V. Hoag, jr., Pittsburgh, Pa.	2 months.....	175 00	Pittsburgh, Pa.....	Improvement of the Allegheny River.
M. W. Venable, Danville, Ky.	1 month.....	175 00	Lock No. 5, Little Kanawha River.	Improvement of the Little Kanawha River.
W. H. Hoarding, Milwaukee, Wis.	2 months.....	200 00	Milwaukee, Wis	Milwaukee Harbor, Wisconsin, and Waukegan Harbor, Illinois.
George Y. Wisner, Detroit, Mich.	$1\frac{7}{30}$ months....	175 00	Sturgeon Bay, Wis....	Examination of Sturgeon Bay Canal, Wisconsin.
R. A. Brown, Beardstown, Ill.	1 month	200 00	La Grange Lock	Improvement of Illinois River.
G. A. M. Liljencrantz, Chicago, Ill.	....do	175 00	U. S. Engineer Office, Chicago, Ill.	Improvement of Chicago Harbor.
Do.....	....do	175 00	.....do	Improvement of Illinois River.
Frederick W. Lehnartz, Grand Rapids, Mich.	$2\frac{25}{30}$ months....	175 00	Grand Rapids, Mich..	Engineering, office and field work in connection with harbors at Charlevoix, Frankfort, Manistee, Ludington, Pentwater, White River, Muskegon, Grand Haven, Black Lake, Saugatuck, South Haven, and Saint Joseph, and harbor of refuge at Portage Lake, Michigan, and harbor at Michigan City, Ind.; Grand River from its mouth to city of Grand Rapids, Mich.
John A. Mitchell, Ludington, Mich.	$2\frac{25}{30}$ months....	160 00	Saint Joseph, Mich ...	In immediate charge of the rebuilding of north pier at Saint Joseph Harbor, Michigan.
C. P. Gilbert, Detroit, Mich.	2 months.....	200 00	Sand Beach, Mich	Harbor of refuge.
Wm. T. Blunt, Cleveland, Ohio.	28 days	150 00	Toledo, Ohio.....	Toledo Harbor.
E. Siegesmund, Buffalo, N. Y.	19 days	150 00	Buffalo, N. Y	Buffalo Harbor.

Statement showing name and place of residence of each civilian engineer, &c.—Continued.

Name and place of residence.	Time employed.	Compensation (per month).	Where employed.	Work on which employed.
William P. Judson, Oswego, N. Y.	$2\frac{25}{30}$ months....	$175 00	Oswego, Great Sodus, Charlotte.	Office; supervision of repairs, and laying out work at Oswego, Great Sodus, and Charlotte.
J. C. Churchill, jr., Oswego, N. Y.	$1\frac{11}{60}$ months....	175 00	Norwood, N. Y	Harbors at Burlington, Vt.; Plattsburgh, N. Y., and Ticonderoga River, New York; breakwater, Gordon's Landing, Lake Champlain, Vermont.
L. J. Le Conté, Oakland, Cal.	Aug. 5 to Oct. 30, 1886.	166 67	San Francisco, Cal ..	Harbors at Oakland and Redwood, Cal.
William P. Smith, San Francisco, Cal.	$2\frac{25}{30}$ months....	166 67	Snag-boat Seizer.....	Sacramento River.
A. Boschke, San Francisco, Cal.	... do	166 67	San Francisco, Cal....	Construction of dredge.
Philip G. Eastwick, Portland, Oreg.	2 months.....	150 00	U. S. Engineer Office, Portland, and at Point Adams, Oreg.	Mouth of the Columbia River.
James S. Polhemus, Portland, Oreg.	1 month.....	150 00	U. S. Engineer Office, Portland, Point Adams, and at Yaquina Bay, Oregon.	Mouth of the Columbia and Yaquina Bay improvement.
	....do	175 00		
Frank T. Dodge,* Portland, Oreg.	$\frac{12}{30}$ month.....	150 00	Saint Helen's Dike ..	Columbia and Lower Willamette rivers.
	$\frac{6}{30}$ month.....	120 00		
Richard M. Tabor, Portland, Oreg.	$1\frac{11}{30}$ months....	150 00	Snake River.....	Upper Columbia and Snake rivers.
A. J. Brownlee,* Cascade Locks.	$\frac{5}{30}$ month.....	150 00	Portland, Oreg.....	Do.
R. A. Habersham, Portland, Oreg.	$1\frac{5}{30}$ month.....	200 00	Surveying bars, Columbia and Lower Willamette rivers.	Columbia and Lower Willamette rivers.
D. E. Buchanan,* Portland, Oreg.	1 month.....	150 00	Portland, Oreg.....	Upper Willamette.
Samuel H. Yonge, Kansas City, Mo.	$2\frac{20}{30}$ months....	200 00	Kansas City, Mo.....	Improving Missouri River from its mouth to Sioux City.
R. H. Bacot, Quindaro, Kans.	....do	125 00	Quindaro, Kans	
Ed. T. Hermanns, Kansas City, Mo.	....do	125 00	Kansas City, Mo.....	
A. H. Weber, Quindaro, Kans.	....do	125 00	Quindaro, Kans.....	
S. Waters Fox, Saint Joseph, Mo.	2 months.....	200 00	Saint Joseph, Mo	
B. C. Thayer, Saint Joseph, Mo.	....do	125 00	.....do	
O. Sonne, Kansas City, Mo.	....do	125 00	Kansas City, Mo.....	

* Temporarily employed.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 127.

STAKE-LIGHTS BETWEEN NORTH AND SOUTH HERO ISLANDS, LAKE CHAMPLAIN.

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

Letter from the Light-House Board, asking an appropriation for the establishment of two stake-lights in the channel between North and South Hero Islands, Lake Champlain.

FEBRUARY 2, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

TREASURY DEPARTMENT, *February* 1, 1887.

SIR: I have the honor to transmit herewith a letter of the Light-House Board, of the 26th instant, with its inclosure, in regard to amount of commerce passing between North Hero and South Hero Islands, Lake Champlain, and asking that action may be had with a view to obtaining an appropriation of $4,000 for the re-establishment of two stake-lights in the channel between said islands.

I have accordingly respectfully to transmit this communication, that action may be taken by Congress in the premises, if it appears wise to do so, agreeably to the desire of the Light-House Board.

Respectfully, yours,

D. MANNING,
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

TREASURY DEPARTMENT,
OFFICE OF THE LIGHT-HOUSE BOARD,
Washington, January 26, 1887.

SIR: The Board has the honor to acknowledge the receipt of the resolution passed by the Senate on January 13, 1887, calling upon the Light-House Board for information as to the quantity of commerce passing through that part of Lake Champlain lying between the islands of North Hero and South Hero, and of the need of lighting the channel, together with an estimate of the cost of so doing.

In reply, the Board begs leave to state that it has credible information that the steamer Masquam, a boat 150 feet long, 370 tons burden,

and licensed to carry 500 passengers, makes on an average four trips a day through this channel during the season, which commences about the middle of April and closes about the 1st of December.

The Board is also informed that about 200 canal-boats, of some 26,000 tons capacity, and about 50 sailing vessels of some 5,000 tons capacity, passed through this channel last year.

It is also stated that this business has increased at least 500 per cent. since the building of the Saint Johnsbury and Lake Champlain Railroad, and statement is made that it will probably increase as much more in the next five years, as the northern part of Lake Champlain is fast becoming a summer resort.

The Board, at its session on January 21, 1887, took into consideration these and other statements on this subject, and came to the conclusion that the re-establishment of two of the lights in this channel, which were carried away by the ice two years ago, is demanded by the interests of the lake commerce.

It is therefore respectfully recommended that the proper steps be taken to obtain an appropriation of $4,000 for the re-establishment of two stake-lights to mark the channel between North Hero and South Hero Islands, Lake Champlain, upon foundations sufficiently strong to secure them against the floating ice which carried away their predecessors.

A copy of the Senate resolution above referred to is inclosed.

Very respectfully,

S. C. ROWAN,
Vice-Admiral, U. S. N., Chairman.

The SECRETARY OF THE TREASURY.

IN THE SENATE OF THE UNITED STATES,
January 13, 1887.

Resolved, That the Light-House Board be, and it hereby is, directed to report to the Senate what information may be in its possession concerning the amount of commerce through that part of Lake Champlain lying between the islands of North Hero and South Hero, and of the necessity or convenience to that commerce of lighting the channel there, together with an estimate of the expense of a suitable structure or structures for that purpose.

ANSON G. McCOOK,
Secretary.
By CHARLES W. JOHNSON,
Chief Clerk.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 128.

THE AQUEDUCT BRIDGE.

LETTER

FROM

THE SECRETARY OF WAR,

TRANSMITTING

The report of a Board of Engineers on the proposed reconstruction of the Aqueduct Bridge in the District of Columbia.

FEBRUARY 2, 1887.—Referred to the Committee on Appropriations and ordered to be printed.

WAR DEPARTMENT,
Washington City, January 31, 1887.

SIR: I have the honor to forward herewith, for the information of Congress, a letter of the Chief of Engineers transmitting the report of the Board of Engineers on the reconstruction of the Aqueduct Bridge, District of Columbia. I have approved the recommendations of the Chief of Engineers so far as to authorize the reconstruction of the bridge without a draw, the cost to be within the amount appropriated by Congress, so that there may be no delay in the progress of the work, and I deem it my duty to transmit the papers to Congress, in view of the report of the Board that the reconstruction of the bridge without a draw would appear to be an obstruction to navigation.

Very respectfully,

WM. C. ENDICOTT,
Secretary of War.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, D. C., January 27, 1887.

SIR: I have the honor to submit the inclosed report of the Board of Engineers constituted by Special Orders No. 11, from this office, dated January 19, 1887, "to consider a project for the reconstruction of the Aqueduct Bridge across the Potomac River, District of Columbia, under provisions of the act of Congress approved June 21, 1886."

The plan of reconstructing the bridge recommended by the Board "is to build a deck bridge of iron or steel on the present piers; to

change the southern span into a draw span pivoted on the southern abutment; to replace the southern approach by embankment, and to lengthen the span of the northern approach by extending southward far enough to reach a pier placed on the northern end of the old abutment. To reconstruct the bridge on the plans thus indicated will cost $135,000. If, however, the bridge were rebuilt without a draw it would cost $110,000. The balance in hand of the original appropriation is $105,000." To complete the reconstruction of the bridge according to the plan above indicated an additional appropriation of $30,000 will be required, and should the draw be omitted $5,000 additional will be required.

The plan of the Board for the reconstruction of the bridge with a draw is concurred in by this office, and it is recommended for approval, as is also the recommendation of the Board that the question of a draw be referred at once to Congress for such action as may be deemed advisable.

It is also recommended that the officer in charge of the work be required to prepare detailed specifications for the reconstruction of the bridge both *with* and *without* a draw, so that proposals may be invited for its reconstruction on either plain. I beg also to suggest that a copy of the report of the Board be sent to the Speaker of the House of Representatives for the information of the Committee on the District of Columbia; which copy, if the suggestion be approved, will be furnished by this office.

Very respectfully, your obedient servant,

J. C. DUANE,
Brig. Gen., Chief of Engineers.

Hon. WM. C. ENDICOTT,
Secretary of War.

LETTER OF THE PRESIDING OFFICER OF THE BOARD OF ENGINEERS.

WASHINGTON, D. C., *January* 24, 1887.

GENERAL: I have the honor to forward herewith the report of the Board of Engineers convened to report on the reconstruction of the Aqueduct Bridge at Georgetown, D. C.

Respectfully, your obedient servant.

WM. E. MERRILL,
Lieut. Col. of Engineers.

General J. C. DUANE,
Chief of Engineers.

REPORT OF THE BOARD OF ENGINEERS.

WASHINGTON, D. C., *January* 24, 1887.

GENERAL: The Board of Engineers, convened by Special Orders No. 11, dated Headquarters Corps of Engineers, January 19, 1887, "to consider a project for the reconstruction of the Aqueduct Bridge across the Potomac River, District of Columbia, under provision of act of Congress approved June 21, 1886," would respectfully submit the following report:

The Board met in Washington on the 20th instant, and after reading the documents submitted to it and studying the maps and plans in Col-

onel Hains's office, visited the Aqueduct Bridge and examined it and the Potomac River in its vicinity as far as the Chain Bridge and the Little Falls.

The Aqueduct Bridge having already been condemned and closed to travel, it is evidently unnecessary to comment on its condition.

The work of the Board is thus limited to the discussion of the proper method of building a new structure in the place of the one condemned.

The first matter to be considered in building any bridge over a navigable river, is to so design it that it shall not be an unnecessary obstruction to any existing or anticipated navigation. The Board finds on investigation that the Potomac River above the Aqueduct Bridge is now navigable to the foot of the Little Falls, a distance of over 3 miles, by vessels drawing 15 feet of water. The Board also finds that with a very moderate expenditure for the removal of two narrow reefs, a navigation of 20 feet can be carried to the Chain Bridge.

While such depths exist, or can be obtained in this stretch of river, they cannot be utilized by any but the smallest class of vessels, on account of the impossibility of getting above the existing bridge, which is much too low for schooners to pass under it, and has no draw-opening by which they can pass through.

The present bridge was built in order to carry the Alexandria Canal over the Potomac River, and this intended use prevented an increase of height and made a draw impracticable. But the abandonment of this canal has removed this burden, and it is now perfectly feasible to rebuild the bridge with a draw. It then only remains to discuss the question of its necessity or advisability.

Above the bridge, on the Virginia side, are numerous fine quarries of gneiss rock, whose development would be advantageous to the owners and also to consumers in the District and elsewhere. The working of these quarries has been greatly hindered by the impossibility of reaching them with such vessels as are in general use for the transportation of such products, thus making it necessary to rehandle freights destined for a distant market.

The Board has been informed that the artificial island in Hampton Roads, on which Fort Wood was built, was formed of stone shipped from these quarries before the construction of the Aqueduct Bridge prevented sailing vessels from reaching them.

On the Maryland side, above the bridge, there are excellent sites for coal-shipping wharves that are much needed on account of the present crowded condition of the existing wharves below the bridge, and there are also excellent water powers that are thus far undeveloped on account of their inaccessibility to shipping.

For a full statement of the facts in connection with these water powers, we would refer to the accompanying communication from H. H. Dodge and other citizens of the District.

It is the established policy of the Government not to allow private corporations to build bridges over navigable rivers without providing for the passage of navigation; it is also its policy to assist, as far as practicable, in the development of all sources of national wealth.

For these reasons the Board is of the opinion that consistency requires that the Government, in rebuilding the Aqueduct Bridge, should concede to navigation the same rights that it compels private corporations to give in similar cases elsewhere, and that it should aid rather than obstruct the creation of manufacturing industries. In the case before us this can only be done by building the new superstructure with a draw span and the fact that the original bridge, built in the infancy of the

nation and for a totally different purpose, was unprovided with such a span is not a valid objection. The world is progressing, and the objectionable devices of the past should not be reproduced in a present of greater needs and vastly greater resources. The plan of reconstruction which the Board recommends is to build a deck bridge of iron or steel on the present piers; to change the southern span into a draw-span pivoted on the southern abutment; to replace the southern approach by an embankment, and to lengthen the span of the northern approach by extending it southward far enough to reach a pier placed on the northern end of the old abutment.

To reconstruct the bridge on the plans thus indicated will cost $135,000. If, however, the bridge were rebuilt without a draw, it would cost $110,000.

The balance in hand of the original appropriation is $105,000.

It is therefore evident that the funds now available will not permit the complete reconstruction of the bridge, but that an additional appropriation of $30,000 is required if the bridge be rebuilt as recommended, and an additional appropriation of $5,000 in case the draw is omitted. It is probable, however, that the bridge can be reconstructed without the draw for the sum now in hand, by temporarily omitting such matters as can be attended to in the future. While the Board is decidedly of the opinion that the bridge should be so built as not to obstruct navigation, it does not recommend any delay on that account.

It is respectfully recommended that the question of a draw be referred at once to Congress for such action as it may deem best. In the mean time the detailed specifications for the reconstruction of the bridge can be prepared and proposals can be solicited for a bridge, both with and without a draw. Before these proposals can be acted upon Congress will have adjourned, and the question of a draw will have been definitely settled.

Accompanying this report will be found the general specifications under which the bridge should be built. Any additional details that may be required should be added by the engineer in charge.

WM. E. MERRILL,
Lieut. Col. of Engineers.
PETER C. HAINS,
Lieut. Col. of Engineers.
W. R. KING,
Major of Engineers.
IRVING HALE,
First Lieut. of Engineers, Recorder.

The CHIEF OF ENGINEERS, U. S. A.

SPECIFICATIONS.

GENERAL DESCRIPTION.

The bridge will be built on one of the two following plans:

FIRST PLAN.

Commencing at the north end, there will be: (1) A through span, extending from the north side of the Chesapeake and Ohio Canal to the north abutment of the Aqueduct Bridge, resting on an abutment and a pier to be built, the span to be about 160 feet and the clear headway over the canal to be 14 feet. (2) About 127 linear feet of trestle over the north abutment, resting on the existing masonry of the same. (3)

Eight deck-spans and a draw-span over the river, resting on the existing piers and abutments, the spans to be about 114 feet each; the draw will be pivoted on the southern abutment extending over a portion of the southern approach. (4) The southern approach to be of earth, the present causeway to be raised by filling, to the grade of the roadway, with side slopes suitably protected from wash.

SECOND PLAN.

This plan is similar to the first, with the following exceptions: The northern half of the draw will be replaced by a fixed span, similar to the other fixed spans, and the embankment forming the southern approach will be extended northward to the abutment.

WIDTH.

The width of the roadway will be 24 feet in the clear, and there will also be two sidewalks of 6 feet each.

LOAD.

The live load on the deck spans is to be 100 pounds per square foot, and on the through span over the canal, 90 pounds per square foot. The floor system is to be computed for a live load of 100 pounds per square foot or a concentrated weight of a 15-ton steam road-roller. Wind strains of 300 pounds per linear foot of truss on loaded chords, and 150 pounds per linear foot on unloaded chords are to be provided for, and also variations of temperature to the extent of 150 degrees.

MATERIAL, ETC.

The bridge is to be of wrought iron or steel, except the floor-joists and planking, which will be of wood.

A substantial hand-railing is to be provided for the bridge.

LIMITING STRAINS.

The limiting strains for wrought iron in tension will be:
On bottom chords and main diagonals 10,000 pounds per square inch.
On bottom flanges of riveted girders 12,000 pounds per square inch.
On lateral bracing 15,000 pounds per square inch.
Compression members are to be proportioned by an approved formula.
Shearing strains in pins will not exceed 8,000 pounds per square inch.
A proportionate increase in strains will be made for steel.

QUALITY OF MATERIAL.

Wrought iron must be tough, fibrous, and uniform in character, have a limit of elasticity of not less than 26,000 pounds per square inch and an ultimate strength of 50,000 pounds per square inch for small specimens, with the usual reduction for larger specimens, down to minimum of 46,000 pounds per square inch.

STRAIN SHEETS.

Bidders should submit strain sheets for each length of span, a plan and elevation of the same, and such details as the Engineer may require.

DETAILS.

All parts of the bridge should be accessible for painting, examination, and cleaning.

All rivets and riveting should be as usually required for first-class iron bridges. No iron is to be less than one-fourth of an inch in thickness. Rivets and pins are to be of double-refined iron. Pins are to be turned straight and smooth and fit pin-holes within one-fiftieth of an inch, the diameter of the pin to be not less than two-thirds the largest dimension of any tension member attached to it. Suitable bed-plates will be provided and secured to the piers. The floor-beams will project beyond the trusses, in order to support the sidewalks.

PETITION.

All the considerations which induced Congress to buy out the interest of the Alexandria Canal in the Aqueduct trunk, and to discontinue its use as a water-way, can be urged as cogent to the construction of a draw in the bridge now proposed to be built on the site of the Aqueduct Bridge.

Congress had been frequently informed as to the depth of water above the structure and the navigable character of the river; that at points in the channel the depth reached from 19 to 85 feet, and that the largest class of vessels navigating the Potomac River could go to the head of tide-water, 3 miles above the Aqueduct, if it were accessible; that Congress had recognized that such was the need of the situation by appropriations for the removal thence of a few dangerous rocks; and that in early times, and before the erection of the Aqueduct, vessels loaded with cannon, &c., from Mason's foundry, and also loaded for Chesapeake Bay, almost at the site of the present Chain Bridge, 3 miles above the Aqueduct.

Exact information had been communicated to that body as early as 1872 by the report of the Harbor Commission that on the District side of the river there existed about 5,500 feet of river frontage available for wharfing purposes for the largest vessels, and back of which lay, and separated from the river by a few hundred feet of intervening land, the Georgetown level of the Chesapeake and Ohio Canal, 37 feet above the river, supplied with water from a source only some 4 miles distant, at the Little Falls of the Potomac, to be used for water power.

That the wharfage space below the bridge was limited and incapable of extension because of the Potomac Flats improvement, which only contemplated that the river shore at that point should be part of a public park.

That relief was needed, for the reason that coal shipments were necessarily carried on in immediate juxtaposition with flouring mills, and much to the detriment of the latter industry; and that no proper space was afforded for quick dispatch in the matter of shipping coal, the coasting vessels being sometimes four or more deep at the coaling stations, and others at anchor in the stream awaiting a berth.

Such were the facts, accepted as such by Congress, and upon which it based its action in removing this Aqueduct trunk, which for nearly fifty years had stopped the navigation of the river above.

Had the intent of Congress been to secure only a free bridge, and to secure a crossing in utter disregard of the rights of the shipping interest, much money could have been saved, and a bridge erected over and in connection with the trunk, and that part of the water-way of the Alexandria Canal preserved.

The act of 23d February, 1881, providing for the purchase of the Aqueduct Bridge or the erection of an alternative bridge, in express terms called for a draw (XXI Stat. at Large, page 329), and thus recognized that an obstruction existed to navigation, and not only that, but that an immediate remedy was needed, which relief it granted. And, again, Senate bill 1477, passed in Senate May 6, 1884, and Senate bill 200, passed in Senate January 25, 1886, all contain clauses providing for a draw.

Such provision was, it is true, omitted from the act of 21st June, 1886 (although in the bill as it passed the Senate); but it was thought by Senator Riddleberger, the promoter of the measure, inasmuch as that bill contemplated the purchase of the entire work, that that single object be then pressed, and when the bridge was secured, partly by purchase and partly by condemnation, the same considerations which caused Congress to provide for a draw in 1881, &c., could be urged in 1887, without involving the then issue, in which Alexandria was the sole opponent.

It should not be forgotten that the official charts of the Coast Survey show that the Potomac River is navigable nearly to the Little Falls, several miles above this bridge, and the reports of the special board of survey in 1872 emphasize the same facts.

Section 2550 Revised Statutes carries the collection district of Georgetown "to the head of navigable waters" of the Potomac River, Georgetown being its "port of entry." That alone should guarantee its use over its entire course.

But again, the Secretary of War is, by section 8 of the act of 5th July, 1884 (Stats. XXIII, page 148), charged with the special duty of taking care that no obstruction should be maintained over the navigable waters of the United States; and the files of Congress will show that each year the clamor is great either for general legislation upon this subject, or for special provisions of relief each year in the river and harbor bills.

While so much cost is being incurred in removing obstructions beneath the water, certainly no objection can be urged as to the removal of hindrances to navigation which exist above the surface.

It should not be assumed that no necessity will arise for access to the wharfage front above the site of the bridge.

That front has not been used for the reason that a barrier for nearly fifty years has existed in the way of its approach, which has made it incapable of use; but it may well be expected that the increasing needs of this District, so rapidly assuming its

proper proportions as the capital of this nation, will at an early day demand its improvement if free access to it is allowed.

The development of a grand water-power has been and is still being retarded by not being able to get access to the navigable river above.

There are also four mills above this bridge and a large number of quarries, which would be greatly benefited if access to them could be had. The Government is frequently advertising for stone to be delivered at different points, and these quarries could enter into competition, if they could get a masted vessel above the bridge to load, instead of transferring below the bridge from flat-boats.

These quarries were unable (within the past two years) to bid for a large contract advertised for by Colonel Craighill on account of not being able to load vessels direct from the quarries. If vessels could be gotten above the bridge, coal wharves would at once be built for the transshipment of coal and many manufacturing interests be developed, as the water-power above is among the very few to which the sea-going craft could approach.

The objection urged that travel over the bridge will be hindered if a draw is allowed is scarcely worth consideration, and as navigation is the primary object to be provided for, all other interests should be secondary in importance.

In practice it will be seen, however, that the Long Bridge with its two draws does not seem to discourage investment at its Virginia end, and that that section is being rapidly acquired and large industries being there established.

It can, therefore, be confidently expected that this appeal, that a draw be now provided, may be granted, *when no delay will be involved in the work*, which all agree should be pushed to completion with all due dispatch, when the additional expense is so small and can be done now so much more readily and at smaller cost than hereafter, and without delay.

H. H. Dodge,
Mayhew Plater,
Robert E. Frey,
M. W. Galt, Bro., & Co.,
Jno. A. Baker,
Geo. W. Cochran & Co.,
Anthony Hyde,
James G. Berret,
W. W. Corcoran,
B. P. Snyder,
J. W. Thompson,
J. C. McGuire,
E. Francis Riggs,
Nathl. Wilson,
M. J. Adler,
F. L. Moore,
H. M. Sweeny,
W. Laird, jr,
C. M. Matthews,
Austin Herr,
Harris & Shafer,
Aulick Palmer,
Buckey & Marbury,
George H. B. White,
Saml. W. Curriden,
Chas. C. Glover,
Thos. Hyde,
J. L. McFarland.

The Board of Engineers
Appointed to report upon Plans for the Bridge over the Potomac River at Georgetown, to be built under the Act of 21*st June,* 1886.

49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { EX. DOC. No. 129.

LEGAL-TENDER NOTES.

REPLY

OF THE

SECRETARY OF THE TREASURY

TO THE

SPEAKER OF THE HOUSE OF REPRESENTATIVES

ON THE

RESOLUTION OF THE HOUSE OF REPRESENTATIVES OF DECEMBER 20, 1886, RESPECTING REISSUE OF TREASURY NOTES, DESTRUCTION OF UNITED STATES NOTES, AND DENOMINATIONS OF THE LATTER.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1887.

LEGAL-TENDER NOTES.

REPLY

OF THE

SECRETARY OF THE TREASURY

TO THE

SPEAKER OF THE HOUSE OF REPRESENTATIVES

ON THE

Resolution of the House of Representatives of December 20, 1886, *respecting reissue of Treasury notes, destruction of United States notes, and denominations of the latter.*

FEBRUARY 2, 1887.—Referred to the Committee on Banking and Currency and ordered to be printed.

TREASURY DEPARTMENT,
February 1, 1887.

SIR: I have had the honor to receive the following direction from the House of Representatives, and thereon submit the report subjoined

FORTY-NINTH CONGRESS—SECOND SESSION.

CONGRESS OF THE UNITED STATES,
In the House of Representatives, December 20, 1886.

Mr. Wilkins, from the Committee on Banking and Currency, submitted the following; which was agreed to:

Resolved by the House of Representatives, That the Secretary of the Treasury be, and he is hereby, directed to report to this House as soon as possible:

1st. Whether any portion of the money appropriated by the act approved August 4, 1886, known as the Sundry Civil Appropriation Act, has been expended in issuing Treasury notes of large denomination in lieu of notes of small denominations cancelled or retired; and whether any other money belonging to the Government of the United States has been expended for such purpose since August 4, 1886.

2d. How many, if any, one and two dollar notes have been cancelled and destroyed since the passage of said act, by what authority said notes were destroyed, and what sum has been expended in their destruction.

3d. How many, if any, of said notes cancelled and destroyed were mutilated notes, and whether notes of like denominations were issued in their stead.

JNO. B. CLARK, JR.,
Clerk.

The Treasury notes heretofore issued under the authority of Congress and outstanding August 4, 1886, were as follows:

"*Acts prior to* 1846."

Act and per cent.	$50.	$100.	$500.	$1,000.	Fract.	Amount.	Am't under each act.
October 12, 1837—One mill per cent.	$600	$500	.....	.....	$60 00	$1,160 00	
2 per cent.....	150	900	.....	.....	.....	1,050 00	
5 per cent.....	650	600	$500	.....	.....	1,750 00	
6 per cent.....	.....	.....	.....	.....	62 50	62 50	
							$4,022 50
May 21, 1838—6 per cent.....	150	600	500	.....	96 93	1,346 93	
							1,346 93
March 31, 1840—2 per cent.....	700	900	500	.....	.....	2,100 00	
5 per cent.....	250	400	.....	.....	.....	650 00	
6 per cent.....	50	100	500	$2,000	90 00	2,740 00	
6 p. ct. exch.....	50	100	.....	.....	.....	150 00	
							5,640 00
February 15, 1841—2 per cent.....	700	1,300	2,500	1,000	.....	5,500 00	
2 p. ct., 4th issue	50	400	.....	.....	.....	450 00	
5 2-5 p. ct. exch.	1,000	1,000	1,000	1,000	.....	4,000 00	
6 per cent.....	.....	1,900	500	5,000	.....	7,400 00	
6 p. ct., 4th issue	300	.....	2,000	.....	.....	2,300 00	
6 p. ct. exch.....	.....	.....	3,000	5,000	.....	8,000 00	
							27,650 00
January 31, 1842—6 per cent.....	*3,300	19,800	8,500	10,000	223 00	.....	41,823 00
August 31, 1842—6 per cent	.....	100	.....	.....	92 92	.....	192 92
March 3, 1843—1 mill per cent.....	1,750	.....	.....	.....	.....	.....	1,750 00
							82,425 35

Acts since January 1, 1846.

Title of loan.	Authorizing act.	Denominations. $5.	$10.	$20.	$50.	$100.	$500.	$1,000.		Am't.
Treasury notes of 1846...	July 22, 1846	.....	.....	.....	.....	.....	.....	.....	.....	$5,900
Treasury notes of 1847...	Jan. 20, 1847	.....	.....	.....	.....	.....	.....	.....	.....	950
Treasury notes of 1857...	Dec. 23, 1857	.....	.....	.....	.....	.....	.....	.....	.....	1,700
Treasury notes of 1861...	Mar. 2, 1861	.....	.....	.....	.....	.....	.....	.....	.....	3,000
Old demand notes.....	July 17, 1861, and Feb. 12, 1862.	$22,965	$20,995	$13,460	.....	.....	.....	.....	.....	57,430
One-year notes of 1863...	Mar. 3, 1863	.....	7,285	15,450	$6,800	$7,300	.....	.....	$36,835	
Less unknown denominations.	.....	.....	.....	.....	.....	.....	.....	.....	90	
										36,745
Two-year notes of 1863..	Mar. 3, 1863	.....	.....	.....	1,950	8,100	$1,500	$19,000	40,150	
Less unknown denominations.	.....	.....	.....	.....	.....	.....	.....	.....	10,500	
										29,650
Compound-interest notes.	Mar. 3, 1863; and June 30, 1864.	.....	26,400	41,610	72,400	36,500	13,000	7,000	.....	196,910
Seven-thirties of 1861....	July 17, 1861	.....	.....	.....	2,300	4,000	2,500	7,000	.....	15,800
Seven-thirties of 1864 and 1865, (1st series.)	June 30, 1864, and Mar. 3, 1865.	.....	.....	.....	14,400	23,200	9,000	5,000	.....	51,600
Seven-thirties of 1864 and 1865, (2d series.)	..... do	.....	.....	.....	3,050	12,700	14,500	3,000	.....	33,250
Seven-thirties of 1864 and 1865, (3d series.)	..... do	.....	.....	.....	11,650	23,200	7,500	8,000	.....	50,350

Of the Treasury notes outstanding August 4, 1886, there had been, up to January 15, 1887, received into the Treasury, paid and cancelled, in due course to be destroyed, the following:

Title.	Denominations.				Amount.
	$10.	$20.	$50.	$100.	
One-year notes of 1863	9	11	.....	1	$410
Two-year notes of 1863	.....	.....	.....	1	100
Compound-interest notes	28	19	5	3	1,210
Seven-thirties of 1864–'65	.....	.....	3	1	250
Total	37	30	8	6	1,970

It is true that Congress, while in each of the foregoing enactments prescribing the maximum sum and the lowest denomination of Treasury notes issuable thereunder, imposed upon the Secretary of the Treasury the duty of fixing, according to his discretion and current view of the exigencies and conveniences of the public interest and service, sometimes the sums, often the reissue, always the denominations, as well as regulations for custody, redemption, payment, and destruction of the same. It is also true that in any case of reissued Treasury notes Congress thus imposed upon the Secretary of the Treasury the continued exercise of his discretion in the choice and possible change of denominations outstanding.

Nevertheless, I am not aware that the Secretary of the Treasury has had the authority of Congress, under any of the foregoing enactments or otherwise, since August 4, 1886, either to issue Treasury notes of any denomination, large or small, or to reissue any, whether in denominations changed or unchanged.

The first of these resolutions, presented with the authority of the Committee on Banking and Currency, and adopted by the House of Representatives itself, seems, indeed, to convey a different expectation, and I shall defer at once to better instruction; but, as at present informed, I would beg leave to intimate to the Committee and to the House that in all acts of Congress directing or authorizing an issue of Treasury notes, certainly in all acts which ever provided for a reissue of Treasury notes, the time fixed therein for the exercise of any such duty or discretion imposed upon the Secretary has long since elapsed.

But were a more patient scrutiny of the Statutes at Large to disclose some overlooked authority to reissue Treasury notes, I should not, except under fresh instructions from Congress, conceive it a duty to expend "any portion of the money appropriated by the act approved

August 4, 1886," for such a purpose; nor has that or "any other money belonging to the Government of the United States" been expended for such purpose. In the administration of solvent governments, by capable officers, Treasury notes have been reissued only when expenditures were in excess of income, or were thought about to be in excess of income. But I beg leave respectfully to recall the attention of the House of Representatives to the facts which I had the honor to lay before them in my last annual report, showing that such is not the case of this Government, but, contrary, that, for the last seven years, besides expending $24,000,000 per annum in the purchase of a metal at present lacking international currency and superfluous for local currency, the annual excess of ordinary revenue over ordinary expenditure has been about $100,000,000, which excess is gradually enlarging. So that the measure of our present annual surplus taxation, being thus nigh to $125,000,000, is the measure also of the clear distance which separates this Department and this Government from a present need or excuse to reissue Treasury notes.

That another species of our outstanding indebtedness, namely, the legal-tenders or greenbacks, known in law as United States notes, are, equally with what the law designates as Treasury notes, beyond any need or excuse for reissue; that temporary notes which are a debt of principal only, like notes which are a debt of principal and interest, should at once be cashed and cancelled from abundant and superfluous coin in hand not now capable of being applied to any other use—this is so obvious a principle of sound finance, such as a prudent citizen would apply to his private affairs, that any Secretary of the Treasury would be subject to just reproach for departure therefrom by reissues, were it not that the act of May 31, 1878, seems to require of him that fiscal misstep. And I beg leave to submit to the House the question whether, among many other reasons for its repeal, the contraction of the currency sought to be averted by that act can now in any other and better way be prevented than by its repeal. The fact that the $346,681,016 of greenback debt is a greenback currency, is so far from being a reason against its payment that it is the reason which makes its payment and destruction necessary—not without a better currency to take its place; but such a currency is at hand. Of course the greenback debt should be paid. "To the payment in "coin or its equivalent of all the obligations of the United States not "bearing interest, known as United States notes," "the faith of the "United States is solemnly pledged" by the act of Congress, March 18, 1869. But, also, a contraction of the currency should be avoided. The

substitution of a better currency for the greenbacks runs no hazard of contraction. But the consequences of not using our coin surplus thus are serious. For in currency of some sort will the year's taxes be paid, and the excess of receipts over the authorized disbursements of the Treasury would be the measure of the contraction of the currency. This contraction can be avoided by appropriations for an extravagant and reckless outpour and expense like that of war. It can also be avoided by the payment of debt. The first remedy need not be discussed; it is, of course a remedy the most unworthy of the people's representatives. The second remedy is all that remains. What debt, then, shall we pay? Beyond the three per cents, which are already provided for and will soon all be paid, not another dollar of the principal of our funded debt is due for four years to come, and except by a reduction of the interest on the four-and-a-half per cents., and of the fours, such as I suggested to the House of Representatives nearly a year ago in my letter of March 2, 1886, no part of the same can now be cancelled or diminished by anticipatory purchase without paying to the bond-holder a premium on pretty much his own terms. The premium on the four-and-a-half per cents. of 1891 is now 11 per cent.; the premium on the four per cents. of 1907 is now 28 per cent. Payment of the funded debt at these premiums to the bond-holder is thriftless extravagance. But it is an inexcusable extravagance, for the reason shown in my last annual report, namely, that the operation of the present sinking-fund law, and the annual appropriation of 1 per cent. of the debt to that fund which it requires, and which gives us no trouble, will cancel every dollar of the public indebtedness, greenbacks and all, within one twelvemonth of the day that our last great funded loan becomes due and payable, in 1907. We may almost say that our funded debt will thus pay itself, so little excuse have we for hastening its payment. But anticipatory payment of funded debt at a high premium, while successfully getting out of the Treasury its currency tax surplus, and so preventing contraction in that form, is that method, nevertheless, which would contract the currency in another form by too suddenly diminishing national-bank circulation based on the funded debt.

It is therefore necessary now, not only to reduce taxation in order to prevent surplus-tax-collecting from being currency-contracting again and again, but it is necessary also to employ our present and unavoidable tax surplus in the payment, not of funded, but of the unfunded debt. Great extravagance of needless expense or serious monetary trouble can both so be avoided. The people's representatives, by action

before adjournment, can relieve the Secretary of the Treasury from the bad choice between these now present alternatives.

The surplus coin and bullion which will remain in the Treasury after all the bonds subject to call have been paid and before the Fiftieth Congress will assemble, together with the proceeds of surplus taxation which will flow into the Treasury before any possible reduction of taxes by the present Congress can take effect, constitute a sum which can well be got out of the Treasury into the hands of the people where it belongs, by the payment of the greenback debt. Coin certificates are a ready and superior paper money to the greenbacks. The substitution can be effected as a mere matter of Treasury administration whenever two indispensable conditions are first fulfilled by Congress. Of these, the first is that the silver purchases should be stopped. Our approaching difficulties were discernible two years ago, and I commended both those conditions of safety respectfully to the consideration of Congress in my first annual report, in my reply to the resolutions of the House of Representatives last spring, and again in my second annual report. Congress has but to remove the *débris* of two past errors of our predecessors in order effectually to avert monetary difficulties which are now imminent, and to renew a commercial prosperity which will dispel the mephitic atmosphere of our so-called labor troubles. The repeal of the compulsory silver purchases (act of February 28, 1878) is the first and indispensable condition. The repeal of the compulsory post-redemption reissues of United States notes (act of May 31, 1878) is the next and only other condition.

These two repeals are together necessary to prevent either on the one hand an extravagant expense or on the other hand a considerable contraction of the currency. I can see no other alternatives. As the evil is at our door, I cannot conceive that the case admits of further delay.

Renewing the expression of my hope that the Forty-ninth Congress before its near adjournment will enter upon the residue of work which demands attention from the people's representatives—and that it will at once begin to untax the clothing of 60,000,000 people by a repeal of the duty on raw wool—I beg leave to submit herewith an interesting table covering the whole field of Federal taxation, which I was not strong enough to perfect in time to go with my annual report. (See Appendix J.)

In answer to the second and third inquiries of the House of Representatives, above cited, I respectfully refer to the table in Appendix A, which exhibits minutely every change in the distribution of United States notes among their various denominations, by a daily statement

of the amount of them destroyed or credited into the Treasury, or received from the Bureau of Engraving and Printing from August 4, 1886, to December 31, 1886. It appears that between those dates $3,861,857 in one-dollar notes were destroyed, and $3,937,082 in two-dollar notes were destroyed—total, $7,798,939. What sum has been expended in their destruction it would be impossible to fix, because of the mixed character of the denominations of mutilated money handled by the Redemption Bureau of the Treasury. It is usual in the case of the small denominations sent in for redemption to find the paper badly mutilated and difficult to count. But I know of no satisfactory method of computing such an inseparable part of a total and continuous though inconsiderable expense. The table in Appendix A exhibits every detail of that continuous process by which from day to day are fulfilled the requirements of the act of May 31, 1878, making compulsory that post-redemption issue and reissue of the total amount of the debt in circulation as United States notes which was but permitted by section 3579 of the Revised Statutes, and by which from day to day has been exercised the discretion imposed upon the Secretary (sections 3571, 3575, 3580, 3581, etc., of the Revised Statutes, see Appendix H) in respect to the denominations of such notes reissued in like character and amount to replace their mutilated or less desired predecessors. It is obvious from the table, and from similar tables in the Treasurer's report of 1885 and 1886, communicated to the House along with my annual reports of those years, that no ones or twos have been issued, "in the stead" of the $7,798,939 mutilated ones and twos redeemed, cancelled, and destroyed, since August 4, nor instead of any other ones or twos or $10,000, or $5,000, or $1,000 notes likewise cancelled and destroyed. For no ones and twos have been issued since July, 1885.

From an examination of the Treasurer's last annual report, pages 65 to 78, inclusive, and Appendix B, it will be seen that the practice of the Redemption Bureau of the Treasury, from 1862 up to the present time, has been to deliver in exchange for mutilated notes such other notes or denominations as might be required by the person, bank, or banker presenting the former for redemption. The expenses of presentation and return are borne by the party presenting mutilated notes for redemption. It has also been the practice of the Treasury during the same twenty-five years to cause to be printed notes of all denominations in advance of the destruction of the notes returned as mutilated, or as locally inconvenient, and to issue from such previously-printed notes such amounts and denominations as were needed for its own convenience or that of the persons presenting the same for redemption.

There is now in the "reserve vault" of the Treasury the sum of $16,498,000 of such notes. The practice of issuing completed notes and certificates from the Bureau of Engraving and Printing has been very properly stopped by the Treasurer.*

The printed notes and certificates are now held in an incomplete form; the seal of the Treasury is not attached to them until they are required, which is affixed in the Treasury building.

The United States or legal-tender notes destroyed since August 4, 1886, up to December 31, 1886, as appears by Appendix A, have been of the following denominations:

Denomination.	Destroyed.	Issued.	Increase.	Decrease.
1's	$3,861,857	None		$3,861,857
2's	3,937,082	None		3,937,082
5's	6,217,681	$18,300,000	$12,082,319	
10's	3,204,446	12,480,000	9,275,554	
20's	3,054,864	3,600,000	545,136	
50's	1,063,380	200,000		863,380
100's	1,797,190	800,000		997,190
500's	4,028,500	None		4,028,500
1,000's	8,205,000	None		8,205,000
5,000's	10,000	None		10,000
	35,380,000	35,380,000	21,903,009	21,903,009

These figures show a decrease during the period named of $7,798,939 of one and two dollar notes; an increase of $12,082,319 in five-dollar notes; of $9,275,554 in ten-dollar notes; and $545,136 of twenty-dollar notes, or a total increase in notes of small denominations of $14,104,070, and a decrease in large notes of the following denominations and amounts:

50's, of	$863,380
100's, of	997,190
500's, of	4,028,500
1,000's, of	8,205,000
5,000's, of	10,000
	14,104,070

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*United States notes	$16,498,000
Gold certificates	103,680,000
Silver certificates	22,040,000
	142,218,000

In addition to these denominational changes in legal-tender notes, the following changes have occurred in the silver certificates:

Denomination.	Destroyed.	Issued.	Increase.	Decrease.
1's	$2,061	$6,736,000	$6,733,939	.....
2's	None.....	1,984,000	1,984,000	.....
10's	2,114,465	10,440,000	8,325,535	.....
20's	1,148,024	.....	.....	$1,148,024
50's	2,214,750	.....	.....	2,214,750
100's	3,941,400	.....	.....	3,941,400
500's	132,000	.....	.....	132,000
1,000's	142,000	.....	.....	142,000
	9,694,700	19,160,000	17,043,474	7,578,174
		9,694,700	7,578,174	
		9,465,300	9,465,300	

These figures show an increase in one and two dollar certificates of $8,717,939, in ten-dollar certificates of $8,325,535, a decrease of $1,148,024 in twenty-dollar certificates, and a total decrease of large denominations, as stated above, of $6,430,150, making a net increase in small denominations of $15,895,450.

It will thus be seen that the one and two dollar legal-tender notes destroyed ($7,798,939) have been more than replaced by the one and two dollar silver certificates issued, which amount to $8,717,939; and that the total increase of small denominations has been since the 4th of August, 1886, to the 31st day of December, 1886, as follows:

One-dollar silver certificates	$6,733,939	
Two-dollar silver certificates	1,984,000	
Ten-dollar silver certificates	8,325,535	
Five-dollar legal-tender notes	12,082,319	
Ten-dollar legal-tender notes	9,275,554	
Twenty-dollar legal-tender notes	545,136	
		$38,946,483
Less one-dollar legal-tender notes destroyed	3,861,857	
Less two-dollar legal-tender notes destroyed	3,937,082	
Less twenty-dollar silver certificates destroyed	1,148,024	
		$8,946,963
Increase since August 4, 1886		29,999,520

To which can be added—

Standard silver dollars increased in circulation	$5,914,329
Subsidiary silver coin increased in circulation	2,744,871
Minor coin increased in circulation	204,927
Total	38,863,647

In Appendix B will be found the outstanding currency in denominations, as of December 31, 1886; and in Appendix C the total shipments of United States notes, etc., since August 4 to December 31, 1886.

With the desire that the House may be fully informed as to the working of the Treasury in the most ample detail, there have been added the daily statements for December 31, marked "E," and those of January 3, 1887, marked "F" and "G," made to the Treasurer, with details of the accounts upon which payments and receipts are made, and the kind of money received and paid out of each of the several subtreasuries and the Treasury at Washington.

It will be seen by the recapitulation on page 11 of Appendix E that the receipts were—

	Receipts and payments.	Excess of payments.	Excess of receipts.
In national-bank notes	$181,241		$181,241
[Payments none; the $25,000 received at the subtreasuries being forwarded to Washington for redemption.]			
The legal tenders.—Receipts	807,767		
Payments	1,297,629		
		$489,862	
The gold coin—Receipts	221,428		
Payments	154,850		
			66,570
The gold certificates—Receipts	768,730		
Payments	777,450		
		8,720	
The silver certificates—Receipts	293,280		
Payments	428,165		
		134,885	
The standard silver dollars—Receipts	178,820		
Payments	51,077		
			127,743
Subsidiary silver coin—Receipts	51,100		
Payments	46,134		
			4,966
		633,467	380,520
Less receipts December 31		380,520	
Excess of payments		252,947	

The amount of standard silver dollars and subsidiary silver coin ($97,211) put out, with the exception of small amounts used in making change, were put in circulation at an average expense of $1.96 per $1,000.

The withdrawal, begun in the summer of 1885, of the one and two dollar United States notes and their conversion into five-dollar notes, both being known to the Treasury and the public under the denomination of small notes—which title extends to the ten and twenty dollar notes—was due to the fact that the Government had in the Treasury vaults large masses of silver dollars, for which no fitting use could be found. To this statement it may be objected that these coins could be paid out in the ordinary transactions of the Government. This is not true, for one among many reasons, because of the physical impossibility of the movement of the mass of money required to make the payments of the Government; and, secondly, to the fact that all pay-

ments of this character might be said to await the opening of the doors of the Treasury in order to be again paid into the Treasury vaults, as the cost of handling and the bulk of the metal make it an impossible vehicle for the transactions of the Treasury or private business. The Treasury would require 33 tons per day to make its daily payments. Its receipts would be strictly confined to the same metal, which would involve the handling of 33 more tons. A thousand dollars bagged weighs 60 pounds. The physical force does not exist in the Treasury to handle the mass required to effect its daily settlements under such conditions. Objection will be made that the silver certificates could have been used—which is true if the object had been to confine the receipts and payments of the Treasury to this kind of money and to depreciate its value. Such a mode of payment is not practicable so long as the legal-tender United States notes are suffered to exist, and everything called in law a "dollar" is to be upheld in a firm equivalence with our monetary unit of value established by law. Owing to the non-legal-tender character of coin certificates, they would return—as they do now return when issued in large denominations—on the day of issue, or by the succeeding day. This must of necessity happen, because of the fact that, being accepted by the banks as deposits, these notes are transformed into a legal-tender liability of the banks, so that room must instantly be made for further deposits of the same kind by making immediate payment back into the Treasury.

The uses of each denomination of currency, whether note, certificate, or coin, are defined by the daily needs of the people with the greatest distinctness. Were issue now to be made of the one and two dollar legal-tender notes, it would exclude just so many one and two dollar silver certificates from circulation. This is true of each denomination of silver certificates or United States legal-tender notes, but is most strikingly shown in the larger denominations of silver certificates, which, except for their use as a means of redemption of the standard silver dollar, would be absolutely worthless as circulation; in fact, it may be said that they are not used by the community, but that these certificates are only used between the banks and the Government. Paid out by the Government in exchange for silver dollars, the next day, often the same day, they are back in the Treasury vaults, paid in by the banks, as the best use to be made of them by these institutions, in so far as the revenues of the Government arrive to the Treasury by that channel.

There is no doubt that when the silver five-dollar certificates take their full place in the circulation, they will transform the present legal-tender notes into ten and twenty dollar denominations, because it is only in the smallest denominations that any considerable addition can

be made to the currency of the country in this form of money while Congress continues to require also the compulsory reissue of legal-tender notes, and so long as that competition is insisted upon.

As to the successful use of the present amount of silver coinage and its representative certificates, more depends, so long as the legal-tender notes exist, upon the *denomination* of the certificates than upon any other determining cause. Under the issue of the silver certificates in larger forms, a maximum of 45 per cent. was attained in the Treasury's receipts through the customs with a total circulation of $101,000,000, while at present, owing to the issue of smaller denominations, in a circulation of $117,000,000, the receipts in customs of these certificates are only 15 per cent., though during the first months of the current year the receipts of this kind of money may reach 20 per cent.

In examining the changes made in the denominations of legal tenders during the first half of the year, it will be found that these notes generally take the form of large notes, while during the last half the notes issued are of small denominations. This will be found to be true of every year in which record has been kept of these changes, except that during the period of depression through which we have just passed, the changes were generally in the direction of the large notes. This will be found to be true of each period of depression since the issue of the legal-tender notes, and marks the diminished use of the smaller currency brought about by that slackened prosperity among the people. There are those who profess to desire the Secretary of the Treasury to revive the smaller issues of the legal tenders, upon the assumption that profits will accrue by the people losing more of them while in circulation. This scheme is quite as unsound as dishonest; for the loss on currency of this character, either national-bank notes or legal tenders, (Annual Report of the Treasurer for 1886, pages 33, 34, pages 65–67,) does not amount to $\frac{1}{20}$ of 1 per cent. upon the closed issues therein stated, and as to those in which there is an element of worth in excess of the face value, the percentage of loss is not $\frac{1}{200}$ of 1 per cent. per annum. It is, therefore, a fair deduction, as the ones and twos of these old issues are still coming in, though slowly, that $\frac{1}{25}$ of 1 per cent. per annum is the limit of such profit on the loss of a small currency while in use as a circulating medium.

The controlling principle in making the redemptions of the legal-tender notes is to issue these notes in the form demanded by those who present them for redemption when mutilated, and (except the one and two dollar notes, which are replaced by the one and two dollar silver certificates) this has been, and will continue to be, the rule of the De-

partment, until Congress directs a change. Any other course would result in serious embarrassment to the people, and, while it would not otherwise affect the Treasury, would throw upon it the burden of additional and unnecessary labor.

In my letter to the House, of March 2, 1886, I had explained that if it were desired to promote the circulation of a silver certificate of a given denomination without reference to the primary fact of public convenience, it could be accomplished only by shouldering out from concurrent circulation the same denomination of United States notes. (Appendix K.)

In the act approved August 4, 1886, Congress enlarged the limits of the discretion required of the Secretary in respect to the distribution of the silver certificates among various denominations, by authorizing, besides the issue of certificates, upward from "ten dollars each, corresponding with the denominations of the United States notes," the issue of certificates downward from ten dollars and corresponding with the smallest denominations of such notes. But besides enlarging the variety of denominations within which the Secretary was required to exercise his discretion in supplying the wants of the business community, Congress in the same act required the Secretary to issue silver certificates of the three smallest denominations, and left him at liberty to effect their issue in lieu of or in exchange for silver certificates of larger denominations.

Congress had left unmodified the discretion in respect to denominations of United States notes originally imposed upon the Secretary. It had even confirmed the same. In the act of May 31, 1878, which forbade the retiring, cancelling, and destroying of any of those notes and enjoined the reissue and constant circulation of the whole of them, Congress expressly negatived the possible though strained inference that it was thereby prohibiting that daily renewal of mutilated notes with fresh ones of like denomination, which was then provided by law, as also was the daily renewal of mutilated notes with fresh ones of unlike denomination. The discretion thus confirmed was of course no larger in the reissue than in the original issue, nor a different discretion. It has been exercised in subordination to the laws, and in response to the daily requirements of the people, of the United States. (Appendix H.)

The act of August 4, 1886, which made the issue of the silver certificate ones and twos compulsory, and the act of May 31, 1878, which made the reissue of the greenback-total compulsory, have been jointly executed by the abridgment of the smallest and the largest denomina-

tions of the greenbacks, and the enlargement of the smallest silver certificates.

In pointing out a year ago the only way in which such a substitution could be made and the use of silver enlarged while greenbacks exist, the Secretary is happy to have anticipated the wish and the enactment of Congress. These coin certificates can now be made to take the place of the whole greenback circulation, by the prior repeal of the compulsory silver-purchase law and the repeal of the greenback compulsory post-redemption-issue law,—some of the many reasons for which are so fully set forth in my last annual report that they need no repetition here.

Respectfully yours,

DANIEL MANNING,
Secretary of the Treasury.

The Honorable
THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

APPENDIX A.

DAILY STATEMENT OF THE AMOUNT OF UNITED STATES NOTES DESTROYED, CREDITED INTO THE TREASURY, AND RECEIVED FROM THE BUREAU OF ENGRAVING AND PRINTING, BY DATES, FROM AUGUST 4, 1886, TO DECEMBER 31, 1886, INCLUSIVE.

Date.	1's destroyed.	2's destroyed.	5's			10's			20's		50's		100's		500's destroyed.	1000's destroyed.	5000's destroyed.	Total destroyed.	Total credited into Treasury.	Total received from Bureau of Engraving and Printing.
			Destroyed.	Credited into Treasury.	Received from Bureau of Engraving and Printing.	Destroyed.	Credited into Treasury.	Received from Bureau of Engraving and Printing.	Destroyed.	Credited into Treasury.	Destroyed.	Credited into Treasury.	Destroyed.	Credited into Treasury.						
1886.																				
Aug. 4	$12,100	$14,600	$30,000	$160,000	$180,000	$25,000	.....	$160,000	$29,000	.....	$15,900	.....	$17,400	.....	$16,000	.....	.....	$160,000	$160,000	$340,000
5	14,150	11,900	33,000	80,000	180,000	18,500	$120,000	160,000	22,000	$400,000	450	.....	.....	.....	.....	$500,000	.....	600,000	600,000	340,000
6	25,100	41,100	61,000	.....	180,000	38,000	240,000	160,000	30,000	.....	17,700	.....	23,100	.....	1,000	3,000	.....	240,000	240,000	340,000
7	24,100	12,400	14,000	80,000	180,000	10,500	.....	160,000	10,000	.....	3,700	.....	4,300	.....	1,000	.....	.....	80,000	80,000	340,000
9	21,950	21,500	32,250	120,000	180,000	11,000	.....	160,000	12,000	.....	600	.....	700	.....	2,000	18,000	.....	120,000	120,000	340,000
10	18,350	20,400	68,750	.....	180,000	45,500	40,000	120,000	37,000	160,000	10,000	.....	.....	.....	.....	.....	.....	200,000	200,000	300,000
11	19,600	20,200	36,000	160,000	180,000	15,500	.....	120,000	19,000	.....	14,600	.....	22,100	.....	13,000	.....	.....	160,000	160,000	300,000
12	20,850	15,800	24,000	20,000	180,000	16,000	80,000	120,000	19,000	.....	3,550	.....	800	.....	.....	.....	.....	100,000	100,000	300,000
13	14,750	29,900	57,000	100,000	180,000	26,000	80,000	120,000	34,000	.....	2,650	.....	10,700	.....	.....	5,000	.....	180,000	180,000	300,000
14	16,600	19,400	37,250	80,000	180,000	30,000	40,000	120,000	36,000	80,000	21,150	.....	24,100	.....	11,500	4,000	.....	200,000	200,000	300,000
16	24,200	22,300	53,750	140,000	180,000	26,500	80,000	120,000	33,000	.....	12,350	.....	12,900	.....	15,000	20,000	.....	220,000	220,000	300,000
17	19,801	28,965	55,574	20,000	180,000	23,948	40,000	120,000	11,622	80,000	.....	.....	90	.....	.....	.....	.....	140,000	140,000	300,000
18	10,650	9,800	22,500	100,000	180,000	10,000	.....	120,000	18,000	.....	12,350	.....	16,700	.....	.....	.....	.....	100,000	100,000	300,000
19	21,000	19,900	50,000	40,000	180,000	22,500	40,000	120,000	24,000	80,000	5,600	.....	.....	.....	5,000	12,000	.....	160,000	160,000	300,000
20	24,850	28,700	70,750	120,000	180,000	36,500	40,000	80,000	36,000	80,000	18,700	.....	18,500	.....	.....	6,000	.....	240,000	240,000	260,000
21	20,650	13,600	29,000	100,000	180,000	24,500	40,000	80,000	26,000	.....	3,650	.....	5,600	.....	.....	17,000	.....	140,000	140,000	260,000
23	20,350	19,600	40,000	60,000	180,000	23,000	.....	80,000	21,000	80,000	9,150	.....	4,900	.....	2,000	.....	.....	140,000	140,000	260,000
24	.....	.....	.....	.....	180,000	.....	.....	80,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	260,000
25	25,250	33,500	50,750	140,000	180,000	27,000	80,000	80,000	30,000	.....	15,300	.....	15,700	.....	10,500	12,000	.....	220,000	220,000	260,000
26	19,650	16,100	38,250	240,000	180,000	18,000	200,000	80,000	23,000	.....	6,900	.....	8,600	.....	4,500	305,000	.....	440,000	440,000	260,000
27	29,650	33,700	54,250	340,000	180,000	27,500	200,000	80,000	27,000	160,000	12,800	.....	15,100	.....	.....	500,000	.....	700,000	700,000	260,000
28	.....	.....	.....	.....	180,000	.....	.....	80,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	260,000
30	25,750	27,500	86,250	180,000	180,000	39,000	.....	80,000	31,000	80,000	13,600	.....	13,900	.....	13,000	10,000	.....	260,000	260,000	260,000
31	15,400	20,600	51,000	160,000	180,000	39,500	120,000	80,000	37,000	.....	7,500	.....	9,000	.....	.....	100,000	.....	280,000	280,000	260,000
Sept. 1	22,400	19,800	27,250	140,000	180,000	15,500	.....	80,000	18,000	.....	15,050	.....	10,000	.....	6,000	6,000	.....	140,000	140,000	260,000
2	24,300	28,400	64,250	220,000	180,000	28,000	.....	80,000	24,000	.....	8,650	.....	22,400	.....	4,000	16,000	.....	220,000	220,000	260,000
3	.....	.....	.....	340,000	180,000	.....	160,000	80,000	.....	.....	.....	.....	.....	.....	100,000	400,000	.....	500,000	500,000	260,000
4	88,500	16,000	40,000	340,000	180,000	.....	160,000	80,000	.....	.....	.....	.....	.....	.....	268,500	87,000	.....	500,000	500,000	260,000
6	47,400	25,800	34,500	200,000	180,000	35,000	160,000	80,000	38,000	.....	14,200	.....	7,600	.....	137,500	20,000	.....	360,000	360,000	260,000
7	30,000	105,700	50,750	.....	160,000	13,000	280,000	120,000	28,000	.....	13,250	.....	16,800	.....	12,500	10,000	.....	280,000	280,000	280,000
8	70,150	18,400	43,250	.....	180,000	31,000	200,000	.....	17,000	.....	7,400	.....	6,800	.....	6,000	.....	.....	200,000	200,000	180,000
9	64,600	18,600	33,250	180,000	180,000	14,500	.....	.....	33,000	.....	7,650	.....	5,900	.....	1,500	1,000	.....	180,000	180,000	180,000
10	69,450	24,900	48,250	160,000	180,000	35,500	.....	.....	42,000	80,000	6,300	.....	13,600	.....	.....	.....	.....	240,000	240,000	180,000
11	44,300	9,600	23,000	60,000	.....	8,000	.....	.....	15,000	80,000	12,800	.....	6,300	.....	16,000	5,000	.....	140,000	140,000	.....
13	34,150	24,200	55,000	160,000	.....	28,000	.....	.....	16,000	.....	850	.....	1,800	.....	.....	.....	.....	160,000	160,000	.....
14	63,800	34,800	61,250	180,000	.....	25,500	.....	.....	46,000	80,000	19,950	.....	8,700	.....	.....	.....	.....	260,000	260,000	.....
15	61,200	14,400	36,500	160,000	.....	23,500	.....	.....	21,000	.....	800	.....	2,600	.....	.....	.....	.....	160,000	160,000	.....
16	57,250	26,300	54,250	220,000	.....	34,500	.....	.....	33,000	.....	.....	.....	5,700	.....	2,000	7,000	.....	220,000	220,000	.....
17	18,450	16,500	57,000	80,000	.....	19,000	80,000	.....	19,000	.....	11,850	.....	18,200	.....	.....	.....	.....	160,000	160,000	.....
18	.....	160,000	.....	160,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	160,000	160,000	.....
20	32,000	248,000	20,000	220,000	.....	.....	.....	.....	.....	80,000	.....	.....	.....	.....	.....	.....	.....	300,000	300,000	.....
21	61,100	45,100	90,500	300,000	.....	34,000	.....	.....	38,000	.....	13,400	.....	8,400	.....	5,500	4,000	.....	300,000	300,000	.....
22	53,800	19,600	32,000	.....	.....	20,000	160,000	.....	18,000	.....	6,600	.....	2,000	.....	.....	8,000	.....	160,000	160,000	.....
23	20,000	20,000	20,000	420,000	.....	11,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	349,000	.....	420,000	420,000	.....
24	78,700	29,000	62,500	500,000	.....	25,500	.....	.....	31,000	.....	6,800	.....	5,500	.....	3,000	258,000	.....	500,000	500,000	.....
25	100,000	.....	.....	500,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	400,000	.....	500,000	500,000	.....
27	87,600	63,200	118,000	500,000	.....	78,000	.....	.....	85,000	.....	22,100	.....	23,100	.....	14,000	9,000	.....	500,000	500,000	.....
28	16,000	24,000	30,000	480,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	208,000	202,000	.....	480,000	480,000	.....
29	16,000	16,000	20,000	480,000	100,000	21,000	.....	.....	7,000	.....	.....	.....	.....	.....	.....	400,000	.....	480,000	480,000	100,000
30	27,150	27,000	81,750	.....	100,000	20,500	400,000	.....	31,000	.....	10,800	.....	25,300	.....	68,500	108,000	.....	400,000	400,000	100,000
Oct. 1	20,600	25,000	46,500	200,000	100,000	43,500	.....	.....	29,000	.....	4,700	.....	11,700	.....	.....	19,000	.....	200,000	200,000	100,000
2	26,000	30,300	49,750	200,000	100,000	30,000	.....	.....	9,000	.....	3,550	.....	5,400	.....	44,000	2,000	.....	200,000	200,000	100,000
4	9,850	11,500	34,500	200,000	100,000	30,500	.....	.....	33,000	.....	46,950	.....	19,200	.....	12,500	2,000	.....	200,000	200,000	100,000
5	30,597	26,757	46,049	200,000	100,000	33,907	.....	.....	33,340	.....	11,750	.....	11,100	.....	1,500	5,000	.....	200,000	200,000	100,000
6	20,000	20,000	35,000	20,000	100,000	.....	280,000	.....	.....	.....	.....	.....	.....	.....	175,000	50,000	.....	300,000	300,000	100,000
7	24,100	32,000	50,250	300,000	100,000	36,000	400,000	.....	49,000	.....	8,450	.....	16,200	.....	186,000	288,000	$10,000	700,000	700,000	100,000
8	16,600	23,600	64,000	100,000	100,000	32,000	400,000	.....	49,000	.....	2,600	.....	5,700	.....	140,500	166,000	.....	500,000	500,000	100,000
9	25,500	25,100	64,500	240,000	100,000	39,500	.....	.....	46,000	.....	24,000	.....	13,900	.....	1,500	.....	.....	240,000	240,000	100,000
11	17,000	26,000	20,000	360,000	200,000	.....	200,000	.....	.....	.....	.....	.....	80,000	.....	85,000	342,000	.....	560,000	560,000	200,000
12	28,400	31,000	70,750	320,000	200,000	32,000	360,000	.....	37,000	.....	13,050	.....	222,300	.....	88,500	157,000	.....	680,000	680,000	200,000
13	4,000	16,000	20,000	200,000	200,000	.....	160,000	.....	.....	80,000	.....	.....	.....	.....	400,000	.....	.....	440,000	440,000	200,000
14	40,000	32,000	60,000	200,000	200,000	20,000	360,000	.....	14,000	80,000	42,850	.....	97,800	.....	474,000	.....	.....	640,000	640,000	200,000
15	21,450	28,400	63,500	200,000	200,000	65,500	440,000	.....	61,000	80,000	.....	.....	300,000	.....	173,500	166,000	.....	720,000	720,000	200,000
16	22,500	22,500	52,500	200,000	200,000	21,500	160,000	.....	21,000	80,000	8,650	.....	14,900	.....	.....	.....	.....	440,000	440,000	200,000
18	36,000	32,200	49,750	120,000	120,000	28,000	.....	.....	18,000	80,000	23,550	.....	22,600	.....	10,500	2,000	.....	200,000	200,000	120,000
19	28,500	40,100	55,250	120,000	120,000	30,000	40,000	.....	40,000	80,000	4,500	.....	11,400	.....	.....	.....	.....	240,000	240,000	120,000
20	22,550	21,300	38,750	120,000	120,000	16,000	360,000	.....	10,000	160,000	600	.....	1,200	.....	75,500	440,000	.....	640,000	640,000	120,000
21	30,150	35,300	82,250	120,000	120,000	24,500	480,000	.....	17,000	.....	.....	.....	4,500	.....	.....	409,000	.....	600,000	600,000	120,000
22	18,050	14,200	52,750	180,000	180,000	11,500	360,000	.....	.....	.....	24,300	.....	21,300	.....	.....	439,000	.....	540,000	540,000	180,000
23	26,000	31,900	68,500	.....	.....	50,500	360,000	.....	83,000	.....	.....	.....	.....	.....	2,500	52,000	.....	360,000	360,000	.....
29	80,000	40,000	40,000	.....	.....	.....	.....	.....	.....	160,000	.....	.....	.....	.....	.....	.....	.....	160,000	160,000	.....
30	80,000	80,000	.....	.....	.....	.....	.....	.....	40,000	.....	.....	.....	.....	$400,000	.....	200,000	.....	400,000	400,000	.....
Nov. 3	80,000	80,000	.....	.....	.....	.....	.....	.....	.....	160,000	.....	.....	.....	.....	.....	.....	.....	160,000	160,000	.....
6	1,950	2,700	14,350	.....	.....	60,000	.....	.....	7,300	160,000	52,300	.....	1,900	.....	17,500	2,000	.....	160,000	160,000	.....
8	80,000	.....	.....	.....	.....	.....	.....	.....	.....	80,000	.....	.....	.....	.....	.....	.....	.....	80,000	80,000	.....
9	200	200	2,750	.....	.....	7,850	.....	.....	73,000	160,000	7,100	.....	22,900	.....	38,000	8,000	.....	160,000	160,000	.....
15	102,300	259,450	632,000	4,000,000	.....	287,800	.....	.....	214,600	.....	43,050	.....	95,300	.....	93,150	1,434,000	.....	4,000,000	4,000,000	.....
17	3,700	6,500	50,100	.....	.....	65,700	.....	.....	34,000	160,000	.....	.....	.....	.....	.....	.....	.....	160,000	160,000	.....
18	40,000	40,000	80,000	.....	.....	.....	.....	.....	.....	160,000	.....	.....	.....	.....	.....	.....	.....	160,000	160,000	.....
19	56,000	24,000	80,000	.....	.....	.....	.....	.....	.....	160,000	.....	.....	.....	.....	.....	.....	.....	160,000	160,000	.....
20	32,000	32,000	80,000	.....	.....	16,000	.....	.....	.....	160,000	.....	.....	.....	.....	.....	.....	.....	160,000	160,000	.....
23	16,000	24,000	40,000	.....	.....	.....	.....	.....	.....	80,000	.....	.....	.....	.....	.....	.....	.....	80,000	80,000	.....
Dec. 2	48,000	48,000	100,000	.....	.....	40,000	.....	.....	90,000	.....	74,000	.....	.....	400,000	.....	.....	.....	400,000	400,000	.....
9	50,151	48,368	100,698	.....	.....	391	.....	.....	362	.....	30	$200,000	.....	.....	.....	.....	.....	200,000	200,000	.....
15	82,508	80,092	100,460	.....	.....	300	400,000	.....	240	.....	36,700	.....	200	.....	15,500	84,000	.....	400,000	400,000	.....
16	205,650	201,950	61,700	.....	.....	79,200	1,000,000	.....	138,900	.....	99,400	.....	98,200	.....	115,000	.....	.....	1,000,000	1,000,000	.....
18	24,000	16,000	480,000	160,000	160,000	240,000	840,000	.....	240,000	.....	.....	.....	.....	.....	.....	.....	.....	1,000,000	1,000,000	160,000
20	40,000	40,000	140,000	220,000	220,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	220,000	220,000	220,000
21	40,000	40,000	60,000	220,000	220,000	.....	.....	.....	80,000	.....	.....	.....	.....	.....	.....	.....	.....	220,000	220,000	220,000
22	80,000	80,000	320,000	240,000	240,000	160,000	400,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	640,000	640,000	240,000
23	440,000	560,000	.....	240,000	240,000	.....	760,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,000,000	1,000,000	240,000
27	40,000	80,000	220,000	220,000	220,000	160,000	280,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	500,000	500,000	220,000
28	76,000	40,000	280,000	240,000	240,000	86,300	320,000	.....	.....	.....	.....	.....	77,700	.....	.....	.....	.....	560,000	560,000	240,000
29	59,150	77,200	60,750	240,000	240,000	.....	400,000	.....	.....	.....	114,600	.....	159,800	.....	87,500	81,000	.....	640,000	640,000	240,000
30	3,350	4,700	51,750	260,000	260,000	221,050	400,000	.....	221,500	.....	30,050	.....	67,100	.....	5,500	55,000	.....	660,000	660,000	260,000
31	.....	.....	100,000	220,000	220,000	160,000	280,000	.....	240,000	.....	.....	.....	.....	.....	.....	.....	.....	500,000	500,000	220,000
Total.	3,861,857	3,937,082	6,217,681	18,300,000	11,040,000	3,204,446	12,480,000	3,200,000	3,054,864	3,600,000	1,063,380	200,000	1,797,190	800,000	4,028,500	8,205,000	10,000	35,380,000	35,380,000	14,240,000

Face page 16.

H. Ex. 129

APPENDIX B.

OUTSTANDING U. S. CURRENCY DECEMBER 31, 1886.

	1's.	2's.	5's.	10's.	20's.	50's.	100's.	500's.	1,000's.	5,000's.	10,000's.	Total.
United States notes outstanding	$13,130,429 80	$13,622,005 20	$98,174,952	$75,190,683	$55,734,461	$21,544,165	$29,229,820	$8,272,000	$32,722,500	$50,000	$10,000	$347,681,016
Silver certificates (1886) outstanding	6,733,939 00	1,984,000 00	.....	3,971,100	.....	.....	.....	.....	.....	.....	.....	12,689,039
Silver certificates outstanding	.....	.....	.....	54,114,996	43,535,402	5,142,335	5,650,330	1,694,000	1,759,000	.....	.....	111,896,063
				58,086,096								124,585,102
Gold certificates outstanding	.....	.....	.....	.....	11,350,434	8,427,455	8,025,800	12,095,500	17,330,000	13,100,000	51,970,000	122,299,189

RECAPITULATION.

United States notes	$347,681,016
Silver certificates	124,585,002
Gold certificates	122,299,189
Total	594,565,207

APPENDIX C.

MEMORANDUM OF RECEIPTS OF UNITED STATES CURRENCY

FROM JULY 1 TO DECEMBER 31, INCLUSIVE, 1886.

SOURCE OF RECEIPT.	NUMBER OF PACKAGES.			AMOUNT.		
	Received Dec. 31.	To date.	Total.	This day.	To date.	Total.
Adams Express Company	.....	7,016		.....	$53,005,398 05	
	62	62	7,078	$417,097 50	417,097 50	$53,422,495 55
Baltimore and Ohio Express Company	.....	434		.....	623,149 38	
	3	3	437	6,000 00	6,000 00	629,149 38
Cashier Treasury United States	.....	1,387		.....	16,438,749 47	
	1			50,629 00		
	1			3,915 55		
	1			1,000 00		
	1			5,000 00		
	1			14,000 00		
	1			7,000 00		
	1			800 00		
	1	8	1,395	200 00	82,544 55	16,521,294 02
N. B. R. agency	.....	115	115	.....	178,284 80	178,284 80
Registered mail	.....	1,897		.....	200,271 98	
	12	12	1,909	1,866 00	1,866 00	202,137 98
Chief clerk's mail	.....	1,851		.....	15,982 86	
	8	8	1,859	19 10	19 10	16,001 96
Postmasters' credits	.....	90		.....	91,659 82	
	1	1	91	155 97	155 97	91,815 79
Hand	.....	7	7	.....	6,747 40	6,747 40
Totals	94	12,797	12,891	507,683 12	70,560,243 76	71,067,926 88

APPENDIX D.

STATEMENT SHOWING TOTAL SHIPMENTS OF UNITED STATES NOTES, SILVER CERTIFICATES, STANDARD SILVER DOLLARS, AND FRACTIONAL SILVER, FROM AUGUST 4, 1886, TO DECEMBER 31, 1886, INCLUSIVE.

Date.	United States notes.	Silver certificates.	Standard dollars.	Fractional silver.
Aug. 4	$298,447	$600,000	$500	.....
5	203,448	.....	.....	.....
6	24,409	.....	1,800	.....
7	128,691	.....	.....	$700 00
9	179,191	.....	3,300	3,199 00
10	41,197	.....	.....	.....
11	438,242	.....	.....	1,000 00
12	24,742	.....	500	500 00
13	23,494	.....	.....	.....
14	41,035	.....	1,500	.....
16	234,205	.....	1,000	2,500 00
17	36,996	.....	.....	.....
18	40,745	.....	2,000	1,000 00
19	23,993	.....	1,000	.....
20	13,826	.....	.....	1,000 00
21	43,538	.....	.....	.....
23	438,813	200,000	800	200 00
24	38,251	.....	.....	499 75
25	431,102	120,000	.....	50 00
26	237,014	320,000	6,700	3,300 00
27	13,081	.....	1,000	.....
28	246,595	.....	.....	500 00
30	13,702	.....	.....	.....
31	326,221	240,000	.....	2,500 00
Sept. 1	149,198	.....	2,500	.....
2	36,182	.....	1,000	1,000 00
3	8,493	.....	500	500 00
4	421,657	160,000	500	4,000 00
6	261,023	80,000	.....	2,000 00
7	228,777	.....	1,500	3,000 00
8	183,338	.....	1,000	1,999 65
9	19,094	.....	400	.....
10	13,497	.....	3,500	4,000 00
11	49,477	200,000	500	1,300 00
12	.....	80,000	.....	.....
13	276,137	200,000	500	.....
14	255,032	200,000	3,000	1,000 00
15	232,941	400,000	8,500	4,000 00
16	236,537	200,000	.....	1,000 00
17	34,791	.....	500	.....
18	282,491	160,000	.....	1 000 00
20	150,155	80,000	16,000	4,000 00
21	198,193	180,000	5,500	.....
22	170,831	40,000	4,500	2,500 00
23	201,944	360,000	2,500	3,000 00
24	33,651	.....	5,500	1,000 00
25	202,585	80,000	2,000	.....
27	191,612	160,000	8,800	3,200 00
28	173,988	360,000	8,000	.....
29	261,854	.....	6,000	5,000 00
29	180,000	.....	.....	.....
30	160,493	80,000	3,000	4,500 00
Oct. 1	55,406	.....	4,500	500 00
2	686,403	40,000	4,500	.....
3	.....	90,000	.....	.....
4	82,843	13,000	10,500	.....
5	594,586	108,999	15,500	4,500 00
6	695,659	160,000	4,500	3,500 00
		84,000		
7	242,619	360,000	.....	1,000 00
		89,000		
8	39,485	66,000	10,000	1,000 00
9	228,088	200,000	7,500	500 00
		92,000		
11	41,680	72,000	.....	2,000 00
12	199,483	80,000	9,500	1,500 00
		62,000		
13	77,362	52,000	9,500	3,500 00
14	53,301	46 999	11,500	1,200 00
15	176,074	80,000	2,000	500 00
		29,000		
16	87,279	29,999	3,500	.....

STATEMENT TOTAL SHIPMENTS UNITED STATES NOTES, &c.—Continued.

Date.	United States notes.	Silver certificates.	Standard dollars.	Fractional silver.
Oct. 18	$169,439	$240,000 33,999	$1,500	$1,000 00
19	158,220	39,000	17,000	1,000 00
20	192,341	99,999	5,000	.....
21	160,524	29,999	2,500	.....
22	51,442	21,999	2,000	.....
23	48,925	21,000	4,500	.....
25	357,827	105,000	8,500	1,000 00
26	115,827	22,000	7,500	.....
27	213,298	23,000	6,500	500 00
28	86,464	19,000	700	300 00
29	60,835	30,000	3,000	.....
30	145,203	99,000	7,000	.....
Nov. 1	202,892	172,000	3,000	.....
2	354,036	104,000	16,000	1,000 00
3	81,673	402,000	500	500 00
4	627,637	.....	4,500	9,000 00
5	428,775	87,000	2,000	2,000 00
6	270,538	298,000	4,500	1,000 00
8	101,345	172,000	6,500	2,000 00
9	106,370	103,000	11,000	7,000 00
10	118,257	49,000	2,500	2,000 00
11	77,951	35,000	2,500	2,500 00
12	101,971	43,000	200	1,800 00
13	89,400	35,000	6,000	3,000 00
15	94,941	237,000	4,500	3,000 00
16	1,147,678	464,000	4,500	2,500 00
17	205,483	15,000	750	250 00
18	85,171	38,000	4,500	1,500 00
19	72,021	22,999	1,500	.....
20	159,612	474,000	6,500	1,000 00
23	347,430	815,000	10,500	500 00
24	257,982	481,000	6,000	.....
26	113,014	149,999	3,500	.....
27	114,300	211,000	3,000	.....
29	89,341	56,000	.....	.....
30	128,068	197,000	2,000	5,500 00
Dec. 1	578,350	1,048,000	4,300	200 00
2	167,950	200,100	1,000	2,000 00
3	383,699	277,999	4,500	500 00
4	441,168	261,000	1,000	500 00
6	135,758	16,000	1,000	.....
7	169,642	146,000	5,000	2,000 00
8	103,767	102,000	8,000	.....
9	86,251	45,000	1,000	1,500 00
10	80,015	330,000	500	500 00
11	92,461	485,000	1,000	5,000 00
13	185,942	271,000	3,000	.....
14	156,955	34,000	6,000	3,000 00
15	545,585	668,033	2,000	216 53
16	1,263,561	893,211	4,000	2 65
17	396,528	308,000	2,100	896 60
18	513,127	25,539	2,000	1,284 60
19	.....	.....	.....	.....
20	402,636	125,117	500	1,354 55
21	548,806	370,204	4,000	142 25
22	746,404	462,413	.....	785 70
23	885,648	55,486	.....	76 40
24	359,374	48,221	.....	211 00
27	111,482	45,011	2,000	211 50
28	425,319	27,123	.....	75 10
29	494,148	55,552	.....	1,616 10
30	209,700	21,123	.....	714 70
31	99,106	17,010	.....	3 00
	28,134,830	17,828,133	423,850	157,289 08

RECAPITULATION.

United States notes	$28,134,830 00
Silver certificates	17,828,133 00
Standard dollars	423,850 00
Fractional silver	157,289 08
Total	46,544,102 08

CASH ROOM, OFFICE TREASURER UNITED STATES,
January 3, 1887.

APPENDIX E.

DAILY REPORT OF RECEIPTS AND DISBURSEMENTS.

WASHINGTON, D. C.

The following is a report of the receipts and disbursements by Treasury offices for the dates and for the accounts specified:

Treasurer's Office—Form 544.]

OFFICE OF TREASURER U. S. AT
WASHINGTON, D. C.,
December 31, 1886.

	In national-bank notes.	In United States notes.	In gold coin.	In gold certificates.	In silver certificates.	In standard dollars.	In subsidiary silver and mixed.	Totals.
RECEIPTS, TO CREDIT OF—								
Treasurer U. S., transfer account:								
Miscellaneous	.....	$43,837 00	.....	.....	$2	$1	$2 34	$43,842 34
Treasurer U. S., general account:								
For customs	.....	545 00	.....	.....	50	.....	53	595 53
For miscellaneous	$35 00	5,725 00	.....	.....	1,017	10	2 78	6,789 78
For transfers of funds	96,000 00	82,075 00	.....	$83,000 00	114,000	.....	07	375,075 07
Secretary of the Treasury	.....	.....	.....	.....	.....	.....	25	25
U. S. disbursing officers	.....	369 00	.....	.....	80	.....	.....	449 00
Redemption account	43,801 00	77,617 00	.....	.....	.....	2,800	2,821 62	127,039 62
Exchanges	1,080 00	4,082 00	.....	.....	379	.....	.....	5,541 00
Five per cent. fund	.....	6,809 00	.....	.....	1,000	.....	60	7,809 60
Totals	140,916 00	221,059 00	.....	83,000 00	116,528	2,811	2,828 19	567,142 19
Outstanding receipts	6,802 00	28,000 00	.....	.....	.....	2,800	3,325 60	40,927 60
PAYMENTS, CHARGEABLE TO—								
Treasurer U. S., general account:								
For interest checks, drafts, coupons, &c.	.....	209,730 00	.....	.....	.....	2	31	209,732 31
For transfers of funds	.....	.....	.....	.....	17,000	.....	.....	17,000 00
U. S. disbursing officers	.....	68,460 00	.....	.....	.....	439	393 31	69,292 31
Redemption account	143,198 62	70,395 00	.....	.....	47,078	7	17 85	117,497 85
Exchanges	.....	.....	$75 00	.....	.....	2,928	2,538 00	5,541 00
National-bank notes redeemed, receipts by express	.....	35,460 00	.....	.....	34	.....	5 62	35,499 62
Totals	.....	384,045 00	75 00	.....	64,112	3,376	2,955 09	454,563 09
Outstanding receipts paid	11,516 00	21,909 00	.....	.....	.....	15,260	4,040 00	52,725 00
National-bank notes received	396,271 73	Cash-room, redemption of bonds.						
Transfer checks issued	253,073 11	7,092 90	72,609 85	101,581 32	.....	.....	.....	434,357 18

BALTIMORE, MD.

OFFICE OF ASSISTANT TREASURER U. S. AT BALTIMORE, MD.,
December 31, 1886.

	In national-bank notes.	In United States notes.	In gold coin.	In gold certificates.	In silver certificates.	In standard dollars.	In subsidiary silver and mixed.	Totals.
RECEIPTS, TO CREDIT OF—								
Treasurer U. S., transfer account:								
For miscellaneous	.....	$150	.....	.....	$120	.....	$0 75	$270 75
Treasurer U. S., general account:								
For customs	$65	4,825	.....	$570	6,730	$3	2 61	12,195 61
For internal revenue	1,105	1,170	.....	.....	400	10	29 29	2,714 29
For miscellaneous	91	.....	.....	.....	50	8	1 30	150 30
For transfers of funds	1,115	4	.....	.....	.....	.....	08	1,119 08
Redemption account	.....	.....	.....	.....	230	.....	2,600 00	2,830 00
Exchanges	1,870	2,480	$120	.....	810	1,840	.....	7,120 00
Totals	4,246	8,629	120	570	8,340	1,861	2,634 03	26,400 03
Outstanding receipts	.....	.....	.....	.....	.....	27,100	8,520 00	35,620 00
PAYMENTS, CHARGEABLE TO—								
Treasurer U. S., transfer account	.....	1,005	.....	.....	.....	.....	.....	1,005 00
Treasurer U. S., general account:								
For interest checks, drafts, coupons, &c	.....	1,875	5,000	.....	.....	.....	60	6,875 60
For transfers of funds	7,000	.....	.....	.....	.....	.....	.....	7,000 00
Post-Office account	.....	25	.....	.....	.....	.....	.....	25 00
U. S. disbursing officers	.....	12,440	.....	.....	13,960	469	87 41	26,956 41
Redemption account	.....	680	.....	.....	.....	.....	.....	680 00
Exchanges	.....	.....	.....	.....	740	1,800	3,710 00	6,250 00
Outstanding receipts paid	.....	1,270	.....	.....	.....	.....	.....	1,270 00
Totals	7,000	17,295	5,000	.....	14,700	2,269	3,798 01	50,062 01

NEW YORK, N. Y.

OFFICE OF ASSISTANT TREASURER U. S. AT NEW YORK, N. Y.,
December 31, 1886.

	In national-bank notes.	In United States notes.	In gold coin.	In gold certificates.	In silver certificates.	In standard dollars.	In subsidiary silver and mixed.	Totals.
RECEIPTS, TO CREDIT OF—								
Treasurer U. S., transfer account:								
For five per cent. fund	.....	$2,925	.....	.....	$5,430	.....	$0 12	$8,355 12
Treasurer U. S., general account:								
For customs	.....	7,166	$1,000	.....	1,550	$50	8 85	9,774 85
	.....	28,000	2,000	$69,000	36,000	1,000	.....	136,000 00
For internal revenue	.....	.....	.....	300	.....	.....	.....	300 00
For miscellaneous	$26	26,852	.....	3,600	.....	.....	7 05	30,485 05
For silver certificates	.....	4,000	.....	6,000	3,000	.....	.....	13,000 00
For standard silver dollars	.....	.....	.....	2,500	.....	.....	.....	2,500 00
For subsidiary silver coin	.....	500	.....	.....	.....	.....	.....	500 00
For transfers of funds	.....	.....	.....	34,130	17,560	.....	26 68	51,716 68
U. S. disbursing officers	.....	808	.....	.....	.....	.....	89	808 89
Redemption account	.....	16,030	.....	.....	.....	.....	19,129 00	35,159 00
Exchanges	.....	22,140	128,000	438,300	1,600	36,225	.....	626,265 00
Presented through clearing-house, $428,016.42	.....	.....	.....	.....	.....	.....	.....	.....
Returned to clearing-house, $50,013.77	.....	.....	.....	.....	.....	.....	.....	.....
Returned on acc't red'n and exc., $128.99	.....	.....	.....	.....	.....	.....	.....	.....
Totals	26	108,421	131,000	553,830	65,140	37,275	19,172 59	914,864 59
Outstanding receipts	.....	20,830	128,000	.....	.....	59,634	51,364 00	259,828 00
PAYMENTS, CHARGEABLE TO—								
Treasurer U. S., general account:								
For interest checks, drafts, coupons, &c	.....	903	.....	.....	.....	.....	45	903 45
Subsidiary silver coin (Treas. let., Dec. 31, '86)	.....	.....	.....	.....	.....	.....	3,000 00	3,000 00
Transfers of funds	.....	.....	.....	.....	.....	.....	280 00	280 00
U. S. disbursing officers	.....	222,807	.....	.....	24,000	1,660	241 68	248,708 68
Exchanges	.....	420,000	18,700	.....	.....	11,500	11,840 00	462,040 00
Outstanding receipts paid	.....	23,926	.....	180,300	88,560	.....	.....	292,786 00
Outstanding receipts paid clearing-house, $186,540	.....	.....	.....	.....	.....	.....	.....	.....
Made through clearing-house, $375,183.80	.....	7,167	.....	440,000	.....	.....	38	447,167 38
Balance due clearing-house, $447,167.38	.....	.....	.....	.....	.....	.....	.....	.....
Totals	.....	674,803	18,700	620,300	112,560	13,160	15,362 51	1,454,885 51

PHILADELPHIA, PA.

OFFICE OF ASSISTANT TREASURER U. S. AT PHILADELPHIA, PA.,
December 31, 1886.

	In national-bank notes.	In United States notes.	In gold coin.	In gold certificates.	In silver certificates.	In standard dollars.	In subsidiary silver and mixed.	Totals.
RECEIPTS, TO CREDIT OF—								
Treasurer U. S., transfer account:								
For miscellaneous	.....	$1,883	.....	$50	$940	.....	$0 75	$2,873 75
Treasurer U. S., general account:								
For customs	.....	4,422	$6,918	11,090	14,290	$61	14 58	36,795 58
For miscellaneous	$598	1,765	50	1,500	1,098	11	5 69	5,027 69
For transfers of funds	1,950	2,330	30	80	3,350	12	1 99	7,753 99
Post-Office account	20	1,879	.....	70	1,251	1,000	47	4,220 47
U. S. disbursing officers	2,000	.....	.....	.....	....	.....	.....	2,000 00
Redemption account	950	11,121	45	880	16,227	5,120	.....	34,343 00
Exchanges	.....	.....	20,000	1,053	.....	.....	.....	21,053 00
Totals	5,518	23,400	27,043	12,790	22,862	17,311	5,143 48	114,067 48
Outstanding receipts	.....	11,527	.....	.....	860	25,200	5,720 00	43,307 00
PAYMENTS, CHARGEABLE TO—								
Treasurer U. S., transfer account	.....	4,500	.....	.....	14	.....	02	4,514 02
Treasurer U. S., general account:								
For interest checks, drafts, coupons, &c	.....	3,000	.....	.....	.....	108	98	3,108 98
For transfers of funds	6,000	.....	.....	.....	.....	.....	1,500 00	7,500 00
Post-Office account	.....	4,830	.....	.....	.....	5	12 97	4,847 97
U. S. disbursing officers	.....	2,110	1,019½	.....	43,854	1,504	262 22	48,749 72
Redemption account	.....	16,205	.....	.....	31,780	1,605	2,098 00	51,688 00
Exchanges	.....	.....	.....	20,000	.....	1,053	.....	21,053 00
Outstanding receipts paid	.....	.....	.....	.....	.....	.....	.....	47,985 00
Totals	6,000	30,645	1,019½	20,000	75,648	4,275	3,874 19	141,461 69

BOSTON, MASS.

OFFICE OF ASSISTANT TREASURER U. S. AT BOSTON, MASS.,
December 31, 1886.

	In national-bank notes.	In United States notes.	In gold coin.	In gold certificates.	In silver certificates.	In standard dollars.	In subsidiary silver and mixed.	Totals.
RECEIPTS, TO CREDIT OF—								
Treasurer U. S., transfer account:								
For miscellaneous	.....	$9,895	$3,050	$2,100	$26,730	.....	$1 82	$41,776 82
Treasurer U. S., general account:								
For customs	$340	13,534	305	1,580	11,150	$1,145	20 76	28,074 76
For miscellaneous	.....	172	.....	.....	.....	.....	77	172 77
For currency certificates, act June 8, 1872	.....	10,000	.....	.....	.....	.....	.....	10,000 00
For subsidiary silver coin	.....	500	.....	.....	.....	.....	.....	500 00
For transfers of funds	6,300	9	.....	8,400	270	.....	26	14,979 26
Post-Office account	4,700	185	5	.....	.....	17	12 97	4,919 97
U. S. disbursing officers	.....	450	.....	.....	.....	.....	5 92	455 92
Redemption account	.....	2,650	.....	.....	.....	13,465	5,150 00	21,265 00
Exchanges	1,195	1,096	.....	100,100	2,230	.....	.....	104,621 00
Totals	12,535	38,491	3,360	112,180	40,380	14,627	5,192 50	226,765 50
Outstanding receipts	.....	7,650	.....	.....	.....	23,715	23,703 00	55,068 00
PAYMENTS, CHARGEABLE TO—								
Treasurer U. S., transfer account	.....	.....	.....	100,000	8,000	.....	.....	108,000 00
Treasurer U. S., general account:								
For interest checks, drafts, coupons, &c	.....	2,000	275	15,000	290	14	24	17,579 24
For transfers of funds	.....	.....	....	.....	.....	.....	500 00	500 00
Post-Office account	.....	.....	.....	.....	230	5	2 82	237 82
U. S. disbursing officers	.....	6,091	.....	22,150	41,410	1,111	135 37	70,897 37
Exchanges	.....	.....	100,000	.....	.....	3,737	884 00	104,621 00
Outstanding receipts paid	.....	.....	.....	.....	20,580	.....	.....	20,580 00
Totals	.....	8,091	100,275	137,150	70,510	4,867	1,522 43	322,415 43

CINCINNATI, OHIO.

OFFICE OF ASSISTANT TREASURER U. S. AT CINCINNATI, OHIO,
December 30, 1886.

	In national-bank notes.	In United States notes.	In gold coin.	In gold certificates.	In silver certificates.	In standard dollars.	In subsidiary silver and mixed.	Totals.
RECEIPTS, TO CREDIT OF—								
Treasurer U. S., transfer account:								
For miscellaneous	$350	$535	.....	.....	$600	$100	$0 08	$1,585 08
Treasurer U. S., general account:								
For customs	.....	1,650	$2,405	.....	3,130	655	.....	7,840 00
For internal revenue	5	20	.....	.....	30	.....	66	55 66
For miscellaneous	30	100	.....	.....	50	4	47	184 47
For currency certificates, act June 8, 1872	.....	60,000	.....	.....	.....	.....	.....	60,000 00
For transfers of funds	3,000	3,500	.....	$1,000	2,500	.....	.....	10,000 00
Post-Office account	100	240	.....	.....	160	.....	.....	500 00
U. S. disbursing officers	.....	500	.....	.....	800	11	2 13	1,313 13
Redemption account	.....	1,000	.....	.....	.....	.....	8,175 00	9,175 00
Exchanges	20	80	.....	.....	90	18,500	.....	18,690 00
Totals	3,505	67,625	2,405	1,000	7,360	19,270	8,178 34	109,343 34
Outstanding receipts	.....	1,000	.....	.....	.....	24,500	9,500 00	35,000 00
PAYMENTS, CHARGEABLE TO—								
Treasurer U. S., transfer account	.....	50	.....	.....	50	10	.....	110 00
Treasurer U. S., general account:								
For interest checks, drafts, coupons, &c	.....	1,400	.....	.....	1,500	50	7 29	2,957 29
For currency certificates, act June 8, 1872	.....	50,000	.....	.....	.....	.....	.....	50,000 00
For transfers of funds	5,000	.....	.....	.....	.....	4,000	489 70	9,489 70
Post-Office account	.....	155	.....	.....	150	.....	3 78	308 78
U. S. disbursing officers	.....	600	.....	.....	400	20	6 84	1,026 84
Redemption account	.....	7,600	.....	.....	1,000	.....	.....	8,600 00
Exchanges	.....	.....	.....	.....	16,500	190	.....	16,690 00
Outstanding receipts paid, $25,100	.....	.....	.....	.....	.....	.....	.....	.....
Totals	5,000	59 805	.....	.....	19,600	4,270	507 61	89,182 61

CHICAGO, ILL.

OFFICE OF ASSISTANT TREASURER U. S. AT CHICAGO, ILL.,
December 30, 1886.

	In national-bank notes.	In United States notes.	In gold coin.	In gold certificates.	In silver certificates.	In standard dollars.	In subsidiary silver and mixed.	Totals.
RECEIPTS, TO CREDIT OF—								
Treasurer U. S., transfer account:								
For miscellaneous	.....	$2,030	.....	.....	.....	.....	.....	$2,030 00
Treasurer U. S., general account:								
For customs	.....	4,675	$1,450	.....	$10,300	.....	$0 19	16,425 19
For internal revenue	$220	865	330	$200	250	$35	65	1,900 65
For miscellaneous	170	1,730	.....	20	80	.....	.....	2,000 00
Post-Office account	60	150	.....	.....	40	.....	1 33	251 33
U. S. disbursing officers	.....	1	.....	.....	.....	1	1 50	3 50
Redemption account	.....	.....	.....	.....	.....	34,000	4,000 00	38,000 00
Exchanges	35	385	20	.....	330	320	470 00	1,560 00
Totals	485	9,836	1,800	220	11,000	34,356	4,473 67	62,170 67
Outstanding receipts	.....	.....	.....	.....	.....	29,000	6,000 00	35,000 00
PAYMENTS, CHARGEABLE TO—								
Treasurer U. S., general account:								
For interest checks, drafts, coupons, &c	.....	12,295	.....	.....	220	17	4 20	12,536 20
For transfers of funds	.....	.....	.....	.....	.....	6,000	7,999 70	13,999 70
U. S. disbursing officers	.....	47,340	.....	.....	450	1,167	8 93	48,965 93
Redemption account	.....	.....	.....	.....	37,655	.....	.....	37,655 00
Exchanges	.....	840	.....	.....	20	215	485 00	1,560 00
Outstanding receipts paid, $37,655	.....	.....	.....	.....	.....	.....	.....	.....
Totals	.....	60,475	.....	.....	38,345	7,399	8,497 83	114,716 83

SAINT LOUIS, MO.

OFFICE OF ASSISTANT TREASURER U. S. AT SAINT LOUIS, MO.,
December 31, 1886

	In national-bank notes.	In United States notes.	In gold coin.	In gold certificates.	In silver certificates.	In standard dollars.	In subsidiary silver and mixed.	Totals.
RECEIPTS, TO CREDIT OF—								
Treasurer U. S., transfer account:								
For miscellaneous	$1,000	$2,700	.....	.....	$2,000	$800	.....	$6,500 00
Treasurer U. S., general account:								
For customs	.....	865	$400	.....	1,000	2,000	$0 12	4,265 12
For miscellaneous	.....	130	.....	.....	.....	.....	2 52	132 52
For silver certificates	.....	.....	.....	.....	.....	25,190	.....	25,190 00
For standard silver dollars	500	113	.....	.....	180	.....	.....	793 00
For subsidiary silver coin	.....	192	.....	.....	.....	.....	.....	192 00
For transfers of funds	3,500	313,165	.....	$2,000	10,820	.....	1 48	329,486 48
Post-Office account	505	1,266	.....	120	490	.....	10 27	2,391 27
Redemption account	.....	.....	.....	.....	.....	.....	3,260 00	3,260 00
Totals	5,505	318,431	400	2,120	14,490	27,990	3,274 39	372,210 39
PAYMENTS, CHARGEABLE TO—								
Treasurer U. S., general account:								
For interest checks, drafts, coupons, &c	.....	16,630	.....	.....	.....	.....	5 20	16,635 20
For silver certificates	.....	.....	.....	.....	.....	793	.....	793 00
For standard silver dollars	.....	.....	.....	.....	25,190	.....	.....	25,190 00
For subsidiary silver coin	.....	3,260	.....	.....	.....	.....	.....	3,260 00
For transfers of funds	7,000	.....	.....	.....	.....	6,000	1,500 00	14,500 00
Post-Office account	.....	190	.....	.....	.....	.....	5 03	195 03
U. S. disbursing officers	.....	40,910	.....	.....	.....	.....	3 71	40,913 71
Redemption account	.....	.....	.....	.....	.....	.....	192 00	192 00
Totals	7,000	60,990	.....	.....	25,190	6,793	1,705 94	101,678 94

NEW ORLEANS, LA.

OFFICE OF ASSISTANT TREASURER U. S. AT NEW ORLEANS,
December 30, 1886.

	In national-bank notes.	In United States notes.	In gold coin.	In gold certificates.	In silver certificates.	In standard dollars.	In subsidiary silver and mixed.	Totals.
RECEIPTS, TO CREDIT OF—								
Treasurer U. S. transfer account:								
Miscellaneous	.....	.....	.....	.....	.....	$4,420	$80 00	$4,500 00
Treasurer U. S., general account:								
For customs	.....	$710	$30	$20	.....	95	3 81	858 81
For internal revenue	$255	610	.....	.....	$260	100	9 96	1,234 96
For miscellaneous	.....	175	.....	.....	400	.....	1 99	576 99
For standard silver dollars	500	2,000	.....	3,000	.....	.....	.....	5,500 00
For transfers of fund	.....	.....	.....	.....	1,340	1,500	.....	2,840 00
Patent-Office account	.....	.....	.....	.....	.....	1,485	15 00	1,500 00
U. S. disbursing officers	7,750	7,245	.....	.....	5,180	.....	.....	20,175 00
Totals	8,505	10,740	30	3,020	7,180	7,600	110 76	37,185 76
PAYMENTS, CHARGEABLE TO—								
Post-Office account	.....	.....	.....	.....	.....	31	2 05	33 05
U. S. disbursing officers	.....	1,480	.....	.....	2,500	2,006	2 68	5,988 68
Redemption account	.....	.....	.....	.....	5,000	.....	.....	5,000 00
Totals	.....	1,480	.....	.....	7,500	2,037	2,004 73	13,021 73

SAN FRANCISCO, CAL.

OFFICE OF ASSISTANT TREASURER U. S. AT SAN FRANCISCO, CAL.,
December 24, 1886.

	In national-bank notes, Treasury drafts and checks.	In United States notes.	In gold coin.	In gold certificates.	In silver certificates.	In standard dollars.	In subsidiary silver and mixed.	Totals.
RECEIPTS, TO CREDIT OF—								
Treasury U. S., transfer account:								
For 5 per cent. fund	.....	.....	$4,990	.....	.....	$2	$1 28	$4,993 28
Treasury U. S., general account:								
For customs	.....	$120	18,410	.....	.....	28	17 65	18,575 65
For internal revenue	.....	690	6,150	.....	.....	568	71 93	7,479 93
For miscellaneous	.....	.....	3,720	.....	.....	4	78	3,724 78
For transfers of funds, account shipment silver	.....	.....	22,000	.....	.....	.....	.....	22,000 00
U. S. disbursing officers	$10,144 69	.....	.....	.....	.....	.....	.....	10,144 69
Exchanges	.....	325	.....	.....	.....	15,117	.....	15,442 00
Totals	10,144 69	1,135	55,270	.....	.....	15,719	91 64	82,360 33
PAYMENTS, CHARGEABLE TO—								
Treasurer U. S., transfer account	.....	.....	170	.....	.....	1	50	171 50
Treasurer U. S., general account:								
For drafts, &c	9,762 89	.....	200	.....	.....	.....	.....	9,962 89
For transfers of funds	.....	.....	.....	.....	.....	2,500	2,570 00	5,070 00
Post-Office account	.....	.....	1,195	.....	.....	.....	2 10	1,197 10
U. S. disbursing officers	381 80	.....	16,045	.....	.....	130	61 28	16,618 08
Exchanges	.....	.....	12,170	.....	.....	.....	3,272 00	15,442 00
Totals	10,144 69	.....	29,780	.....	.....	2,631	5,905 88	48,461 57

RECAPITULATION OF DAILY REPORT OF RECEIPTS AND DISBURSEMENTS, DECEMBER 31, 1886.

	In national-bank notes.	In United States notes.	In gold coin.	In gold certificates.	In silver certificates.	In standard silver dollars.	In subsidiary silver and mixed.	Totals.
RECEIPTS AT OFFICE OF—								
Treasurer U. S., Washington, D. C	$140,916	$221,059	.....	$83,000	$116,528	$2,811	$2,828 19	$567,142 19
Assistant Treasurer U. S.:								
Baltimore, Md	4,246	8,629	$120 00	570	8,340	1,861	2,634 03	26,400 03
New York, N. Y	26	108,421	131,000 00	553,830	65,140	37,275	19,172 59	914,864 59
Philadelphia, Pa	5,518	23,400	27,043 00	12,790	22,862	17,311	5,143 48	114,067 48
Boston, Mass	12,535	38,491	3,360 00	112,180	40,380	14,627	5,192 50	226,765 50
Cincinnati, Ohio	3,505	67,625	2,405 00	1,000	7,360	19,270	8,178 34	109,343 34
Chicago, Ill	485	9,836	1,800 00	220	11,000	34,356	4,473 67	62,170 67
Saint Louis, Mo	5,505	318,431	400 00	2,120	14,490	27,990	3,274 39	372,210 39
New Orleans, La	8,505	10,740	30 00	3,020	7,180	7,600	110 76	37,185 76
San Francisco, Cal	.....	1,135	55,270 00	.....	.....	15,719	91 64	72,215 64
Totals	181,241	807,767	221,428 00	768,730	293,280	178,820	51,099 59	2,502,365 59
PAYMENTS AT OFFICE OF—								
Treasurer U. S., Washington, D. C	.....	384,045	75 00	.....	64,112	3,376	2,955 09	454,563 09
Assistant Treasurer U. S.:								
Baltimore, Md	*7,000	17,295	5,000 00	.....	14,700	2,269	3,798 01	50,062 01
New York, N. Y	.....	674,803	18,700 00	620,300	112,560	13,160	15,362 51	1,454,885 51
Philadelphia, Pa	*6,000	30,645	1,019 50	20,000	75,648	4,275	3,874 19	141,461 69
Boston, Mass	.....	8,091	100,275 00	137,150	70,510	4,867	1,522 43	322,415 43
Cincinnati, Ohio	*5,000	59,805	.....	.....	19,600	4,270	507 61	89,182 61
Chicago, Ill	.....	60,475	.....	.....	38,345	7,399	8,497 83	114,716 83
Saint Louis, Mo	*7,000	60,990	.....	.....	25,190	6,793	1,705 94	101,678 94
New Orleans, La	.....	1,480	.....	.....	7,500	2,037	2,004 73	13,021 73
San Francisco, Cal	.....	.....	29,780 00	.....	.....	2,631	5,905 88	38,316 88
Totals	25,000	1,297,629	154,849 50	777,450	428,165	51,077	46,134 22	2,780,304 72

*Transferred to Washington for redemption.

APPENDIX F.

NATIONAL-BANK REDEMPTION AGENCY.

RECEIPTS OF NATIONAL-BANK NOTES AND RETURNS ASKED FOR JANUARY 3, 1887.

Number of packages.	Place.	Amount.	Returns asked for.							Total.
			Checks.	U. S. notes.	Silver certificates.	Credits.		Coin.		
						Depositary account.	Redemption account.	Silver dollars.	Fractional silver.	
1	Albany, N. Y	$1,000					$1,000			$1,000
1	Boonville, Ind	600					600			600
1	Brooklyn, N. Y	1,000	$1,000							1,000
1	Baltimore	7,000				$7,000				7,000
16	Boston	281,282	225,000	$15,000	$2,000	39,000	282			281,282
2	Cincinnati	15,000				15,000				15,000
4	Chicago	15,000	10,000		5,000					15,000
2	Cleveland, Ohio	2,000	1,000		1,000					2,000
1	Columbus, Ohio	1,000							*1,000	1,000
1	Cumberland, Md	320					320			320
2	Detroit, Mich	6,000	1,000	5,000						6,000
1	Evansville, Ind	5,000	5,000							5,000
1	Erie, Pa	1,000	1,000							1,000
1	Emporia, Kans	1,000	1,000							1,000
1	Fort Wayne, Ind	1,000					1,000			1,000
1	Jackson, Tenn	5,000	5,000							5,000
1	Knoxville, Tenn	7,000	7,000							7,000
1	Louisville	1,000		1,000						1,000
2	Milwaukee	11,000	11,000							11,000
1	Minneapolis	1,000	1,000							1,000
1	Madison, Ind	1,000	1,000							1,000
2	Mercer, Pa	2,000	1,000				1,000			2,000
2	Memphis, Tenn	3,000	2,000	†1,000						3,000
3	Middletown, Conn	3,000	1,000		1,000		1,000			3,000
1	Newark, N. J	1,000			1,000					1,000
5	New Orleans	25,000	4,000		1,000	20,000				25,000
1	New Bedford, Mass	2,000					2,000			2,000
1	New Haven, Conn.	2,000		2,000						2,000
3	New York	40,000	37,000	3,000						40,000
1	Norfolk, Va	1,500		1,500						1,500
5	Omaha, Nebr	7,000	4,000	3,000						7,000
1	Portland, Me	6,000					6,000			6,000
2	Philadelphia	11,000		5,000		6,000				11,000
1	Princeton, Ind	1,000					1,000			1,000
5	Providence	11,000	6,000		2,000		3,000			11,000
1	Pawtucket, R. I	1,500			1,500					1,500
1	Savannah	1,000			1,000					1,000
1	Scranton	878	878							878
2	Springfield, Mass	2,000	2,000							2,000
1	Terre Haute	2,000	2,000							2,000
1	Troy, N. Y	1,500	1,500							1,500
1	Utica, N. Y	1,000					1,000			1,000
1	Yonkers, N. Y	1,000					1,000			1,000
1	Portsmouth, Ohio	500	500							500
1	Salt Lake City	1,000	1,000							1,000
1	Leavenworth	600					600			600
2	Saint Louis	10,000			3,000	7,000				10 000
1	Canton, Ohio	1,000	1,000							1,000
1	Flint, Mich	1,000	1,000							1,000
1	Abilene, Kans	1,000	1,000							1,000
93		505,680	335,878	36,500	18,500	94,000	19,802		1,000	505,680

*Dimes. †Large notes.

NATIONAL-BANK REDEMPTION AGENCY—Continued.

RECAPITULATION OF RETURNS ASKED FOR:

Checks on sub-treasuries		$335,878
United States notes, 5's	$22,500	
10's	10,000	
20's	3,000	
Large notes	1,000	
		36,500
Silver certificates, 1's and 2's		18,500
Credits in depositary account	94,000	
in redemption account	19,802	
		113,802
Silver coin, fractional		1,000
Total		505,680

APPENDIX G.

REDEMPTION DIVISION, UNITED STATES TREASURER'S OFFICE.

	Place.	Receipts January 3, 1887—Amount.				Payments.					
		United States notes.	Silver certificates.	Gold certificates.	Total.	United States notes.	Silver certificates.	Checks.	Credits.	Credits, five per cent.	Total.
	Assistant treasurer, Boston	$87,000 00			$87,000 00				$87,000		$87,000 00
	Assistant treasurer, Cincinnati	15,000 00			15,000 00				15,000		15,000 00
	Assistant treasurer, Chicago	17,000 00			17,000 00				17,000		17,000 00
	Assistant treasurer, New Orleans	21,900 00	$8,520	$580	31,000 00				31,000		31,000 00
	Boston	21,700 00			21,700 00	$1,000 00	$20,700				21,700 00
	Massachusetts	4,500 00			4,500 00		4,500				4,500 00
	Connecticut	13,651 25			13,651 25	2,659 35	8,500			$2,491 90	13,651 25
	Rhode Island	11,500 00	1,000		12,500 00	6,000 00	6,500				12,500 00
	Maine	3,000 00			3,000 00		3,000				3,000 00
	New York City	19,000 00			19,000 00	8,000 00	11,000				19,000 00
	New York State	13,000 00			13,000 00	6,500 00	3,500	$1,000		2,000 00	13,000 00
	Philadelphia	5,000 00			5,000 00		5,000				5,000 00
	Pennsylvania	18,990 75			18,990 75	11,390 75	4,000	1,000		2,600 00	18,990 75
	New Jersey	2,000 00			2,000 00		1,000	1,000			2,000 00
	Minnesota	3,500 00			3,500 00	2,000 00	1,500				3,500 00
	Wisconsin	9,000 00			9,000 00	6,000 00	3,000				9,000 00
	Ohio	11,270 61	1,000		12,270 61	5,500 00	2,000	650		4,120 61	12,270 61
	Indiana	13,000 00			13,000 00	12,000 00	1,000				13,000 00
	Chicago	30,500 00	1,500		32,000 00	9,000 00	23,000				32,000 00
	Illinois	2,500 00			2,500 00		2,500				2,500 00
	Michigan	12,000 00			12,000 00	6,500 00	5,500				12,000 00
	Iowa	1,421 00			1,421 00	421 00	1,000				1,421 00
	Virginia	6,435 00	1,000		7,435 00	2,500 00	1,000	935		3,000 00	7,435 00
	West Virginia	2,155 00			2,155 00	55 00	1,000			1,100 00	2,155 00
	Kentucky	6,500 00	500		7,000 00	4,000 00	3,000				7,000 00
	Tennessee	5,500 00	1,000		6,500 00	6,500 00					6,500 00
	Missouri	14,632 00			14,632 00	6,500 00	8,132				14,632 00
	North Carolina	1,000 00			1,000 00					1,000 00	1,000 00
	Alabama	1,056 00			1,056 00	1,056 00					1,056 00
	Georgia	1,546 00			1,546 00	546 00	1,000				1,546 00
	Mississippi		1,000		1,000 00		1,000				1,000 00
	Utah	1,000 00			1,000 00			1,000			1,000 00
	Nebraska	16,000 00			16,000 00	4,000 00	8,000	4,000			16,000 00
	Colorado	1,500 00	500		2,000 00			2,000			2,000 00
158 packages	Total by express	393,757 61	16,020	580	410,357 61	102,128 10	130,332	11,585	150,000	16,312 51	410,357 61

Mail	Alabama				150 00	Mail cases were paid for by notes per registered mail and transfer checks, as requested.					
	Arkansas				10 00						
	Canada				1 00						
	Delaware				1 00						
	Georgia				79 00						
	Illinois				280 00						
	Iowa				5 00						
	Kansas				140 00						
	Louisiana				6 25						
	Maine				4 10						
	Massachusetts				77 10						
	Michigan				43 00						
	Missouri				50 20						
	Mississippi				2 00						
	New York				39 50						
	New Jersey				1 00						
	North Carolina				107 00						
	New Mexico				47 00						
	Ohio				13 00						
	Oregon				570 00						
	Pennsylvania				146 50						
	South Carolina				8 00						
	Tennessee				2 00						
	Wisconsin				138 00						
	Washington Territory				386 00						
	Virginia				354 00						
59 package	Total by mail				2,660 65						2,660 65
Cashier	Cases (10 packages)				55,796 00						55,796 00
											468,814 26

RECAPITULATION OF RETURNS ASKED FOR.

United States notes, 5s and 10s	$102,128 10
Silver certificates, 1s and 2s	130,332 00
Transfer checks on assistant treasurers	11,585 00
For credit 5 per cent. account national banks	16,312 51
Credit in general account assistant treasurers	150,000 00
Mail cases paid by notes and checks	2,660 65
Cases paid for by cashier	55,796 00
Total (227 packages)	468,814 2

APPENDIX H.

AN ACT to authorize the issue of United States notes, and for the redemption or funding thereof, and for funding the floating debt of the United States. February 25, 1862.

That the Secretary of the Treasury is hereby authorized to issue, on the credit of the United States, one hundred and fifty millions of dollars of United States notes, not bearing interest, payable to bearer, at the Treasury of the United States, and of such denominations as he may deem expedient, not less than five dollars each.

AN ACT to authorize the purchase of coin and for other purposes. March 17, 1862.

SEC. 4. *And be it furtner enacted*, That in all cases where the Secretary of the Treasury is authorized by law to reissue notes he may replace such as are so mutilated or otherwise injured as to be unfit for use with others of the same character and amount; and such mutilated notes, and all others which by law are required to be taken up and not reissued, shall, when so replaced or taken up, be destroyed in such manner and under such regulations as the Secretary of the Treasury may prescribe.

AN ACT to authorize an additional issue of United States notes and for other purposes. July 11, 1862.

SEC. 1. May receive and cancel any notes heretofore lawfully issued under any act of Congress, and in lieu thereof issue an equal amount in notes such as are authorized by this act.

JOINT RESOLUTION to provide for the immediate payment of the Army and Navy of the United States. January 17, 1863.

SEC. 1. That the Secretary of the Treasury be, and he is hereby, authorized, if required by the exigencies of the public service, to issue on the credit of the United States the sum of one hundred millions of dollars of United States notes, in such form as he may deem expedient, not bearing interest, payable to bearer on demand, and of such denominations not less than one dollar, as he may prescribe.

AN ACT to provide ways and means for the support of the Government. March 3, 1863.

SEC. 2. And in lieu of any amount of said Treasury notes thus exchanged, or redeemed or paid at maturity, the Secretary may issue an equal amount of other Treasury notes; and the Treasury notes so exchanged, redeemed, or paid shall be canceled and destroyed as the Secretary may direct.

SEC. 3. And any of the said notes, when returned to the Treasury, may be reissued from time to time as the exigencies of the public service may require. And in lieu of any of said notes, or any other United States notes, returned to the Treasury and canceled or destroyed, there may be issued equal amounts of United States notes, such as are authorized by this act.

AN ACT to provide ways and means for the support of the Government and for other purposes. June 30, 1864.

SEC. 2. And the Secretary of the Treasury may redeem and cause to be canceled and destroyed any Treasury notes or United States notes heretofore issued under authority of previous acts of Congress, and substitute, in lieu thereof, an equal amount of Treasury notes such as are authorized by this act, or of other United States notes.

SEC. 8. *And be it further enacted*, That the Secretary of the Treasury is hereby authorized and required to make and issue from time to time such instructions, rules, and regulations to the several collectors, receivers, depositaries, officers, and others who may receive Treasury notes, United States notes, or other securities in behalf of the United States, or who may be in any way engaged or employed in the preparation and issue of the same, as he shall deem best calculated to promote the public convenience and security, and to protect the United States, as well as individuals, from fraud and loss.

AN ACT to suspend further reduction of the currency. February 4, 1868.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That from and after the passage of this act the authority of the Secretary of the Treasury to make any reduction of the currency, by retiring or canceling United States notes, shall be, and is hereby, suspended; but

nothing herein contained shall prevent the cancellation and destruction of mutilated United States notes, and the replacing of the same with notes of the same character and amount.

SEC. 251, Revised Statutes. The Secretary of the Treasury shall make and issue from time to time such instructions and regulations to the several collectors, receivers, depositaries, officers, and others who may receive Treasury notes, United States notes, or other securities of the United States, or who may be in any way engaged or employed in the preparation and issue of the same, as he shall deem best calculated to promote the public convenience and security, and to protect the United States, as well as individuals, from fraud and loss.

SEC. 3571, R. S. United States notes shall be of such denominations not less than one dollar, as the Secretary of the Treasury may prescribe, shall not bear interest, shall be payable to bearer, and shall be in such form as the Secretary may deem best.

SEC. 3575, R. S. The Secretary of the Treasury may provide for the engraving and preparation, and for the issue of fractional and other notes, and shall make such regulations for the redemption of such notes when mutilated or defaced, and for the receipt of fractional notes in payment of debts to the United States except for customs, in such sums, not over five dollars, as may appear to him expedient.

SEC. 3579, R. S. When any United States notes are returned to the Treasury, they may be reissued, from time to time, as the exigencies of the public interest may require.

SEC. 3580, R. S. When any United States notes returned to the Treasury are so mutilated or otherwise injured as to be unfit for use, the Secretary of the Treasury is authorized to replace the same with others of the same character and amounts.

SEC. 3581, R. S. Mutilated United States notes, when replaced according to law, and all other notes which by law are required to be taken up, and not reissued, when taken up, shall be destroyed in such manner and under such regulations as the Secretary of the Treasury may prescribe.

SEC. 3689, R. S. Expenses of national loan: To pay the expenses of the issue, reissue, transfer, delivery, redemption, and destruction of securities, legal-tender notes, fractional currency, checks, certificates, commissions, and for any plate and seal engraving and printing required by the Treasury Department, one per centum of the amount of legal-tender notes, fractional currency, and securities issued during each fiscal year.

PUBLIC—No. 65.—AN ACT to forbid the further retirement of United States legal-tender notes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That from and after the passage of this act it shall not be lawful for the Secretary of the Treasury or other officer under him to cancel or retire any more of the United States legal-tender notes. And when any of said notes may be redeemed or be received into the Treasury under any law from any source whatever, and shall belong to the United States, they shall not be retired, cancelled, or destroyed, but they shall be reissued and paid out again and kept in circulation: *Provided*, That nothing herein shall prohibit the cancellation and destruction of mutilated notes and the issue of other notes of like denomination in their stead, as now provided by law.

All acts and parts of acts in conflict herewith are hereby repealed.

Approved May 31, 1878.

APPENDIX J.

REVENUE FROM TAXES FOR 1886.

Statement showing the receipts of the United States Government from the following sources during the year ending June 30, 1886.

Sources.		Revenue.
INTOXICANTS:		
Distilled spirits (inland)	$69,092,266 00	
Distilled spirits (customs)	2,834,696 25	
Fermented liquors (inland)	19,676,731 29	
Fermented liquors (customs)	585,102 26	
Wines (customs)	3,774,348 93	
Ginger ale or ginger beer (customs)	29,538 66	
		$95,992,683 39
SUGAR, MOLASSES, AND CONFECTIONERY		51,778,948 34
TOBACCO:		
(Inland)	$27,907,362 53	
Leaf (customs)	4,905,118 02	
Manufactures of (customs)	3,405,996 43	
		36,218,476 98
WOOL, MANUFACTURES OF		27,278,527 54
RAW MATERIALS:		
Food:		
Fruits, including nuts	$3,498,569 39	
Rice	1,184,138 24	
Breadstuffs	1,042,404 08	
Animals	326,822 76	
Salt	706,324 54	
Vegetables	637,545 67	
Fish	502,287 54	
Provisions, comprising meat and dairy products	478,969 67	
Cocoa, prepared	7,157 55	
	8,384,219 44	
Other raw materials:		
Wool, raw	5,126,108 35	
Flax, hemp, jute, sisal grass, &c	1,841,726 24	
Coal, bituminous	581,099 98	
Iron ore	532,956 26	
Seeds	404,757 87	
Chemicals, drugs, dyes, and medicines	351,193 11	
Hops	217,917 68	
Bristles	149,981 63	
Copper, ore	103,096 07	
Zinc, and manufactures of	88,889 97	
Clays or earths	71,986 93	
Malt, barley	64,618 20	
Sponges	59,392 57	
All other crude, n. e. s	50,028 57	
Grease	49,172 88	
Mineral substances, n. e. s	14,430 54	
Wood	5,570 22	
Oils, whale and fish	5,054 00	
		18,490,914 66
ARTICLES, MOSTLY OF CLASSES C, D, E, (*see* APPENDIX E):		
Iron and steel, manufactures of:		
Class B	2,798,716 00	
Class C	8,500,813 49	
Class D	2,799,390 00	
		14,098,919 49
Silk, manufactures of:		
Class C	133,794 00	
Class D	805 00	
Class E	13,803,497 61	
		13,938,096 61
Cotton, manufactures of:		
Class B	27 00	
Class C	335,678 00	
Class D	6,870,260 49	
Class E	4,546,241 40	
		11,752,206 89

REVENUE FROM TAXES FOR 1886—Continued.

Receipts of the United States Government, &c.—Continued.

Sources.		Revenue.
Flax, manufactures of:		
Class C	$289,492 00	
Class D	6,768,800 43	
Class E	347,797 43	
		$7,406,089 86
Chemicals, drugs, dyes, and medicines:		
Class A	7,523 00	
Class B	32,173 00	
Class C	3,808,146 49	
Class D	143,503 45	
Class E	5,087 00	
		3,996,432 94
Glass and glassware		3,694,923 69
Leather, and manufactures of:		
Class C	$1,265,620 40	
Class D	1,996,612 47	
		3,262,232 87
Earthen, stone, and china ware		2,829,539 75
Fancy articles		2,456,398 59
Wood, and manufactures of:		
Class B	$12,128 00	
Class C	969,756 00	
Class D	435,847 22	
		1,417,731 22
TAXES ON KNOWLEDGE, LITERATURE, ART, ETC.:		
Books, Class D	533,478 05	
Maps, Class D	3,602 75	
Engravings, Class D	92,105 00	
Art works:		
Paintings, Class E	248,328 75	
Statuary, Class E	26,704 41	
Musical instruments, Class E	358,093 87	
		1,262,312 83
Hats, bonnets, and hoods, and materials for:		
Class C	883,299 85	
Class D	144,792 01	
		1,028,091 86
Jewelry and precious stones, Class E		900,474 36
Buttons and button materials:		
Class C	$47,921 10	
Class D	841,084 70	
		889,005 80
FINES, PENALTIES, FORFEITURES, AND MISCELLANEOUS RECEIPTS:		
From labor, drayage, and storage	67,693 24	
From service of United States officers	240,753 17	
From customs officers' fees	307,651 76	
From weighing fees	113,397 96	
From fines, penalties, and forfeitures	128,843 58	
From emolument fees	22,939 05	
		881,278 76
ARTICLES MOSTLY OF CLASSES C, D, E—Continued.		
Furs and manufactures of:		
Class C	804,685 60	
Class D	51,044 39	
		855,729 99
Metals, metal compositions, and manufactures of:		
Class B	42,375 00	
Class C	77,758 00	
Class D	651,753 42	
		771,886 42
Tonnage tax on vessels engaged in the foreign trade		508,731 77
ARTICLES MOSTLY OF CLASSES C, D, E—Continued.		
Paints and colors, Class C		419,962 66
Animals, other than for food		395,871 80
Paper and manufactures of:		
Class D	$389,426 69	
Class E	3,043 08	
		392,469 77
Marble and stone, and manufactures of:		
Class B	244,780 00	
Class C	87,025 00	
Class D	37,152 70	
		368,957 70
Clocks and watches, and parts of, Class D		356,504 72
Corsets and corset cloth, Class D		335,039 60
Tax on seal-skins and income from rental of seal islands		318,489 50

REVENUE FROM TAXES FOR 1886—Continued.

Receipts of the United States Government, &c.—Continued.

Sources.		Revenue.
ARTICLES MOSTLY OF CLASSES C, D, E—Continued.		
Gunpowder and all explosive substances:		
Class D	$41,226 90	
Class E	249,547 36	
Oils, mineral and vegetable:		$290,774 26
Class A	139,461 80	
Class C	139,181 61	
		278,643 41
Miscellaneous penalties (internal revenue)		226,509 62
ARTICLES MOSTLY OF CLASSES C, D, E—Continued.		
Lead and manufactures of:		
Class B	$220,460 52	
Class C	722 61	
Class D	764 24	
		221,947 37
Hay, Class A		184,350 72
Gold and silver, manufactures of:		
Class C	$699 00	
Class D	398 60	
Class E	166,478 26	
		167,575 86
Brass, and manufactures of:		
Class B	2,632 01	
Class D	163,770 42	
		166,402 43
Brushes of all kinds, Class D		156,662 88
Cement, Roman, Portland, and all other, Class C		146,878 91
Soap, Class D		116,280 33
Matting and mats for floors, Class D		92,525 41
Carriages, and parts of, Class D		89,728 45
Glue, Class C		86,743 75
Chicory root, ground or unground, burnt or prepared, Class A		80,922 18
Hair, and manufactures of:		
Class B	$27,618 20	
Class C	25,515 04	
Class D	13,911 47	
Class E	1,049 30	
		68,094 01
India-rubber and gutta-percha, manufactures of, Class D		67,356 79
Spices, ground, Class A		66,121 43
Pencils, Class D		62,033 51
Tin, manufactures of, Class D		54,770 54
Umbrellas, parasols, shades, and parts of:		
Class C	$24,800 10	
Class D	26,047 95	
		50,848 05
Saddlery, coach and harness hardware, Class D		49,530 76
Varnish, Class D		45,330 23
Cork, manufactures of, Class D		44,169 65
Ink of all kinds, and ink powders, Class D		36,906 68
Coal and coke (except bituminous), Class B		29,275 34
Blacking of all kinds, Class D		21,820 25
Copper, manufactures of:		
Class B	$7,778 02	
Class C	457 00	
Class D	8,592 00	
		16,827 02
Straw, manufactures of, Class D		15,121 52
Matches, Class D		11,965 54
Jet, manufactures of, Class E		10,190 35
Cocoa-butter, Class A		10,141 80
Gun-wads, Class D		9,931 80
Glucose, Class C		9,045 40
Polishing powder, Class C		8,955 40
Starch, Class D		8,801 46
Philosophical apparatus and instruments, Class D		8,233 05
Plaster of Paris, ground, Class C		7,528 39
Vinegar, Class A		7,170 10
Photographs, Class E		7,140 78
Ginger, preserved, Class A		5,902 40
Chocolate, Class A		5,393 97
Emery, grains, &c:		
Class C	$5,195 27	
Class D	42 40	
		5,237 67
Prune wine, Class E		4,945 20
Candles, Class D		3,761 95
Toothpicks, Class D		3,336 80

REVENUE FROM TAXES FOR 1886—Continued.

Receipts of the United States Government, &c.—Continued.

Sources.		Revenue.
ARTICLES MOSTLY OF CLASSES C, D, E—Continued.		
Chalk, preparations, Class C		$3,223 40
Patent size, Class D		2,946 00
Teeth, manufactured, Class D		2,895 40
Packages, &c., designed to evade duties, Class D		2,887 23
Tar and pitch, Class B		2,246 85
Repairs on vessels, Class D		2,143 91
Wax, and manufactures of, Class D		1,835 61
Electric lights, and parts of, Class D		1,690 80
Coffee, substitutes, Class A		1,612 42
Brooms of all kinds, Class D		907 25
Whalebone, manufactures of, Class D		620 70
Collodion, manufactures of:		
Class C	$103 35	
Class D	335 43	
		438 78
Felt for roofing, Class D		378 60
Manufactured articles, not elsewhere specified, Class D		362 33
Cider, Class E		293 32
Strings, gut, other than for musical instruments, Class D		225 75
Lubricant, Class D		200 00
Size, vegetable, Class C		171 00
Rosin, Class B		137 00
Plum pudding, Class A		107 80
Insects, prepared or not prepared, Class D		88 30
Feather beds, Class D		67 80
Sugar-cake, Class B		54 23
Unmanufactured articles, not elsewhere specified, Class B		42 72
Rags, not elsewhere specified or provided for, Class B		41 50
Rag figures, Class D		39 69
Horn handles, &c., Class D		36 80
Palm leaf manufactures, Class D		33 13
Spirits of turpentine, Class D		12 80
Putty, Class C		7 63
Stearine, Class D		6 40
Drawings, Class D		6 07

APPENDIX K.

Unless by non-receipt of United States notes for taxes on imports, the various inflows to the Treasury are not to be regulated by any individual discretion or skill in this Department. The nature and limits prescribed to our several currencies are fixed by Congress. None is left to the choice and freedom of the people except the gold currency, and that is threatened by the presence of artificial rivals on every side. While these laws and human nature continue as they are, it is probable that the kind of currency receivable at the Treasury, which will first be paid in, will always be that kind (for instance, silver certificates) which has not the legal-tender quality, and is, therefore, more acceptable for liabilities to the Government than for liabilities to private persons.

But there are other limits, even in respect to circulation of full legal-tender money, which may be discerned in practice, whether the reservoirs through which such money flows be large or small. These limits arise from the various uses to which money is put, of small and large denominations, and from everybody's natural endeavor to employ whichever best promotes his convenience in each purchase, payment, or exchange. These are the limits imposed by trade and labor in practical use. The car companies accumulate five-cent pieces. The Clearing-House takes in $10,000 certificates. Given a supply of all other denominations, the number of one-dollar coins or bills that will be employed cannot be made to exceed a certain amount. They will, if once forced out, return again speedily, and the excess will stay in the reservoir, Treasury, or bank, uncalled for. If forced out and kept out, they will occupy the place in the circulation which another denomination would have filled more conveniently had the public enjoyed an option. The same rule holds in respect to every other denomination, qualified by the fact that dimes will effect more payments than dollars can, and a dollar more than a thousand-dollar certificate. Ones and twos, together with silver dollars, cannot both be circulated at the same time to an amount much beyond what would be used optionally of either kind alone. Five-dollar bills and half-eagles are in the same case. The amount of use is different in each denomination, because the kind of use in each is different, and that has limits, as in the use of knives or coats. Ones can be forced to do the work of tens, but the ones will not naturally be put to that use; and if the ones are forced into an unnatural use, the tens heaping up in the reservoir will practically measure the violence. If ones and twos are crowded into the place occupied by silver dollars, the silver dollars will accumulate and go into the form of silver certificates, which in their turn will exclude the national-bank note from circulation and the gold certificate from the custom-house. If it were desired to promote the circulation of a silver certificate of a given denomination without reference to the primary fact of public convenience, it could be accomplished only by shouldering out from concurrent circulation the same denomination of national bank notes, of United States notes, and of gold certificates. The law is general. It holds as well in respect to any given group of denominations. The whole volume of any particular kind of currency (for instance, silver certificates) consists of some group of denominations.

These are tedious explanations, but every practiced eye will see their import. The operations of the United States Treasury, under existing laws, can with difficulty be prevented from forcing the Government, in its relations with the people and national banks, to a silver basis.

APPENDIX L.

No. 1.—*Statement of United States notes outstanding and destroyed from August 4, 1886, to January 1, 1887.*

Denominations.	Outstanding August 4, 1886.	Outstanding January 1, 1887.	Destroyed from August 4, 1866, to January 1, 1887.	Increase.	Decrease.
Ones	$16,992,287	$13,130,430	$3,861,857		$3,861,857
Twos	17,559,087	13,622,005	3,937,082		3,937,082
Fives	86,092,633	98,174,952	6,217,681	$12,082,319	
Tens	65,915,129	75,190,683	3,204,446	9,275,554	
Twenties	55,189,325	55,734,461	3,054,864	545,136	
Fifties	22,407,545	21,544,165	1,063,380		863,380
One-hundreds	30,227,010	29,229,820	1,797,190		997,190
Five-hundreds	12,300,500	8,272,000	4,028,500		4,028,500
One-thousands	40,927,500	32,722,500	8,205,000		8,205,000
Five-thousands	60,000	50,000	10,000		10,000
Ten-thousands	10,000	10,000			
	347,681,016	347,681,016			
Unknown	1,000,000	1,000,000			
	346,681,016	346,681,016	35,380,000	21,903,009	21,903,009

APPENDIX M.

CLASSIFIED RECEIPTS AND EXPENDITURES OF TREASURY OFFICES FROM JULY 1, 1886, TO DECEMBER 31, 1886.

	National bank notes.	United States notes.	Gold coin.	Gold certificates.	Silver certificates.	Standard silver dollars.	Fractional silver and mixed.	Total.
Receipts from July 1, 1886, to December 31, 1886	$32,609,775 00	$186,760,763 11	$24,482,889 50	$113,615,960 00	$62,295,924 00	*$23,005,004 00	$7,768,374 54	$450,538,690 15
Issued from July 1, 1886, to December 31, 1886	.....	41,608,000 00	.....	.....	18,716,000 00	.....	.....	60,324,000 00
Total receipts	32,609,775 00	228,368,763 11	24,482,889 50	113,615,960 00	81,011,924 00	23,005,004 00	7,768,374 54	510,862,690 15
Payments from July 1, 1886, to December 31, 1886	12,014,868 00	198,464,867 00	22,811,487 00	134,787,190 00	110,142,369 00	21,821,996 00	11,188,418 66	511,231,195 66
Redemptions from July 1, 1886, to December 31, 1886†	21,469,410 00	41,608,000 00	.....	6,472,836 00	10,552,573 00	.....	.....	80,102,819 00
Total payments	33,484,278 00	240,072,867 00	22,811,487 00	141,260,026 00	120,694,942 00	21,821,996 00	11,188,418 66	591,334,014 66
Net increase of amount on hand	.....	.....	1,671,402 50	.....	.....	1,183,008 00	.....	2,854,410 50
Net decrease of amount on hand	874,503 00	11,704,103 89	.....	27,644,066 00	39,683,018 00	.....	3,420,044 12	83,325,735 01

*Including $200,000 transferred from mints.
†Transferred from sub-Treasury offices to Washington for redemption.

NOTE.

Increase in circulation of United States notes	$11,704,104 00
Increase in circulation of gold certificates	21,171,230 00
Increase in circulation of silver certificates	29,130,445 00
Increase in circulation of standard silver dollars	816,992 00
Increase in circulation of fractional silver coin	3,420,044 12
Total increase of circulation by sub-Treasury offices only	66,242,815 12

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49TH CONGRESS, 2d Session. } HOUSE OF REPRESENTATIVES. { Ex. DOC. No. 130.

HAWAIIAN TREATY.

MESSAGE

FROM THE

PRESIDENT OF THE UNITED STATES,

TRANSMITTING

A report of the Secretary of State, with accompanying resolutions, relating to the treaty between the United States and the Government of the Hawaiian Islands.

FEBRUARY 2, 1887.—Referred to the Committee on the Judiciary and ordered to be printed.

To the House of Representatives of the United States:

In response to the resolution of the House of Representatives adopted on the 22d ultimo, calling upon me for "a copy of the treaty or convention proposed to the Senate and ratified by that body, between the United States and the Government of the Hawaiian Islands," I transmit herewith a report of the Secretary of State, with accompanying papers.

It is proper to remark in this relation that no convention whatever has been "agreed to and ratified" by "the President and Senate", as is recited in the preamble to the said resolution of the House of Representatives, but that the documents referred to, exhibiting the action of the Executive and the Senate, respectively, are communicated in compliance with the request of the resolution.

GROVER CLEVELAND.

EXECUTIVE MANSION,
February 1, 1887.

To the President:

Responding to the resolution of the House of Representatives of the 22d ultimo, referred by the President to this Department, the undersigned Secretary of State has the honor to inclose herewith, with a view to their transmission to the House of Representatives, should the President deem it proper to do so, a copy of the supplementary convention signed December 6, 1884, by Frederick T. Frelinghuysen, late Secretary of State, and Henry A. P. Carter, envoy extraordinary and minister plenipotentiary of His Majesty the King of Hawaii, for a postponement of the term within which notification of the termination of

the existing convention of January 30, 1875, between the United States and Hawaii may be given by either party to the other, as therein provided, which supplementary convention was submitted to the Senate for ratification on December 8, 1884.

The undersigned also submits, with the same view, a copy of the Senate resolution amendatory of said supplementary convention, and attested to have received the votes of two-thirds of the Senators present, which resolution was communicated by the Senate to the Executive on the 20th instant.

Respectfully submitted.

T. F. BAYARD.

DEPARTMENT OF STATE,
Washington, February 1, 1887.

IN EXECUTIVE SESSION,
SENATE OF THE UNITED STATES,
January 20, 1887.

Resolved (*two-thirds of the Senators present concurring*), That the Senate advise and consent to the ratification of the supplementary convention respecting commercial reciprocity between the United States of America and the Hawaiian Kingdom, concluded January 30, 1875, with the following amendments:

After Article I insert the following as Article II:

His Majesty the King of the Hawaiian Islands grants to the Government of the United States the exclusive right to enter the harbor of Pearl River, in the island of Oahu, and to establish and maintain there a coaling and repair station for the use of vessels of the United States, and to that end the United States may improve the entrance to said harbor and do all other things needful to the purpose aforesaid.

Change the number of Article II in the original so that it will read *Article III.*

Attest:

ANSON G. McCOOK,
Secretary.

[Forty-ninth Congress, second session.]

CONGRESS OF THE UNITED STATES,
IN THE HOUSE OF REPRESENTATIVES,
January 22, 1887.

Mr. Wallace submitted the following; which was agreed to:

"Whereas it has been stated in the public prints, and is no doubt true, that the President and Senate have agreed to and ratified a convention, by which the terms of the treaty made between the United States and the Government of the Hawaiian Islands on the 30th day of January, 1875. have been extended for seven years longer, and beyond the period limited for its operation by the original treaty; and

"Whereas by the original treaty it was agreed that certain articles therein mentioned were to be admitted to the United States free of duty; and

"Whereas the original treaty was by its terms subject to the con firmation of an act of Congress, which provision is not inserted in the convention said to have been ratified: Therefore,

"*Resolved*, That the Committee on the Judiciary be instructed to inquire into the facts hereinbefore recited, and to report to this House as soon as possible whether a treaty which involves the rate of duty to be imposed on any article or the admission of any article free of duty can be valid and binding without the concurrence of the House of Representatives, and how far the power conferred on the House by the Constitution of the United States to originate measures to lay and collect duties can be controlled by the treaty-making power under said Constitution.

"*Resolved*, That the President be requested to lay before the House, if consistent with the public welfare, a copy of the treaty, or convention, proposed to the Senate and ratified by that body, between the United States and the Government of the Hawaiian Islands.

"*Resolved*, That the Committee on the Judiciary may report at any time under the foregoing resolution."

Attest:

JNO. B. CLARK, JR.,
Clerk.

Supplementary Convention to limit the duration of the Convention respecting commercial reciprocity between the United States of America and the Hawaiian Kingdom, concluded January 30, 1875.

Whereas a Convention was concluded between the United States of America and His Majesty the King of the Hawaiian Islands, on the thirtieth day of January 1875, concerning commercial reciprocity, which by the fifth article thereof, was to continue in force for seven years from the date after it was to come into operation, and further, until the expiration of twelve months after either of the High Contracting Parties should give notice to the other of its wish to terminate the same; and

Whereas, the High Contracting Parties consider that the increase and consolidation of their mutual commercial interests would be better promoted by the definite limitation of the duration of the said Convention;

Therefore, the President of the United States of America, and His Majesty the King of the Hawaiian Islands, have appointed:

The President of the United States of America, Frederick T. Frelinghuysen, Secretary of State; and

His Majesty the King of the Hawaiian Islands, Henry A. P. Carter, accredited to the Government of the United States, as His Majesty's Envoy Extraordinary and Minister Plenipotentiary;

Who, having exchanged their respective powers, which were found sufficient and in due form, have agreed upon the following articles:

ARTICLE I.

The High Contracting Parties agree, that the time fixed for the duration of the said Convention, shall be definitely extended for a term of seven years from the date of the exchange of ratifications hereof, and further, until the expiration of twelve months after either of the High Contracting Parties shall give notice to the other of its wish to

terminate the same, each of the High Contracting Parties being at liberty to give such notice to the other at the end of the said term of seven years or at any time thereafter.

ARTICLE II.

The present Convention shall be ratified and the ratifications exchanged at Washington, as soon as possible.

In witness whereof, the respective Plenipotentiaries have signed the present Convention in duplicate, and have hereunto affixed their respective seals.

Done at the city of Washington the 6th day of December in the year of our Lord 1884.

FRED'K T. FRELINGHUYSEN. [L. S.]
HENRY A. P. CARTER. [L. S.]